

Star

Chevrolet

A Set *for* Every Car

Ford

Buick

Dodge

Overland

Stude-
baker

Nash

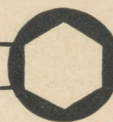
Olds

Essex

Hup

When you see a
"Hex" think of
Blackhawk

When you see a "HEX" think of Blackhawk



BLACKHAWK

Socket Wrenches

Quick-Detachable

1927

BLACKHAWK MANUFACTURING CO., MILWAUKEE

BUICK

CADILLAC

CHANDLER

CHEVROLET

CHRYSLER

CLEVELAND

DODGE

ESSEX

FORD

HUDSON

HUPMOBILE

JEWETT

NASH

OAKLAND

OLDSMOBILE

OVERLAND

PACKARD

PAIGE

REO

RICKENBACKER

STAR

STUDEBAKER

WILLYSKNIGHT



When you see a "HEX" think of Blackhawk

This Book is a Sales Help —How to Use It

Your wrench prospect comes in either to buy a set of tools for his car or to buy a single wrench.

If it is the set he is after tell him you are showing, not a new idea, but a thoroughly tested idea — the Blackhawk idea — which has been found successful not only by car owners, but by thousands of mechanics, engineers and farmers, all of whom are known for the hard usage they give tools.

Then after asking the name of his car turn to the back section of this book which is completely indexed, for all cars and uses. There you find listed just the number and kind of Blackhawk units necessary for all the adjustments on the car your prospect owns. Turn to your stock cabinet and in less time than it takes to tell, you have before the prospect his full Blackhawk set together with the handy bag in which to carry them.

Impress on the customer that these few tools take care of every adjustment on his car he need ever worry about. Then drive home these big talking points: *Heat-treated sockets*, heavy "racket standing" handles, sockets broached to just $\frac{1}{64}$ " oversize, and the all black, long wearing finish. That means a sale if he has not said, "I'll take it" before.

This book provides you with a complete wrench knowledge your customers will appreciate. They like to buy *all* their goods at a place where the people who wait on them *know* what they are talking about.

Now take up the question of the man who wants just one wrench for a special purpose — and how this book can help you increase your sales. Suppose your prospect has a Buick and wants a special. Simply turn to Buick in the back of this book. Then get the complete kit from the Blackhawk stock cabinet for the Buick. Put all except the handle and the $\frac{3}{4}$ " socket to one side on the counter. While the prospect is getting out his money, tell him that for just a little more money — \$1.20 to be exact — he can take care of many more adjustments with the Blackhawk detachable sockets. When you have sold him on this idea, it is only a step to selling him the complete outfit.

Use this book every time a wrench prospect comes in the door and you will be happily surprised at the profit possibilities the Blackhawk line has.



When you see a "HEX" think of Blackhawk

"A Set for Every Car"

—Sell that Idea!

Each set of wrenches made up from Blackhawk units forms a tool set for your prospect's car just as individual as though it had been made to order by the manufacturer of his car. Just enough tools to handle all the adjustments on his particular car.

And when you think about it, the Blackhawk wrench set you sell your prospect is made to order for his particular car. Blackhawk ingenuity has designed units to meet every adjustment on every car. In your Blackhawk stock cabinet you have all those units. It then becomes merely a matter of assembling the proper units for a certain make of car when your prospect is in line for a set of wrenches. In another section this book tells just how to do that.

That is the big idea to sell your prospects and the means to much larger Blackhawk profits for you. Demonstrate the fact that a Blackhawk Quick Detachable set is not a standard assortment of wrenches with detachable sockets some of which fit nothing on his car. Point out clearly that you are selling a set specially designed for the make of car your prospect owns — the result of a great deal of study and research into the adjustment requirements of every single American car.

Then tell Mr. Prospect the advantage Blackhawk wrenches have over every other wrench. Tell him about the heat-treated sockets, tougher than any nut or bolt they will ever meet and exactly $\frac{1}{64}$ " oversize — the husky, extra-leverage handles — the all black, baked on, long wearing finish.

Drive home these Blackhawk features and you will find your cash register ringing much oftener.

BLACKHAWK MANUFACTURING CO., MILWAUKEE

BUICK

CADILLAC

CHANDLER

CHEVROLET

CHRYSLER

CLEVELAND

DODGE

ESSEX

FORD

HUDSON

HUPMOBILE

JEWETT

NASH

OAKLAND

OLDSMOBILE

OVERLAND

PACKARD

PAIGE

REO

RICKENBACKER

STAR

STUDEBAKER

WILLYSKNIGHT



When you see a "HEX" think of Blackhawk

Many Combinations In One Set

Clever designing of handles and attachments in the Blackhawk Quick Detachable Set gives your prospect a range of wrenches to take care of every adjustment he need ever worry about.

All this is the result of the many combinations possible in just one small set of Blackhawk units. First of all you have sockets to fit every nut and bolt on the car from demountable rim nuts to main bearings. Then to the socket you attach whatever handle is best suited to the job. If it's speed and you have lots of room use the brace. If it is a frozen nut use the sliding tee. No matter where the nut or bolt is, regardless of how hard to reach, a combination of Blackhawk units can handle the problem.

A Blackhawk set of units easily handles a range of work that would require a set of ordinary rigid wrenches so bulky and heavy that they would be available only in the garage and would cost many times the price of a set of Blackhawk units.

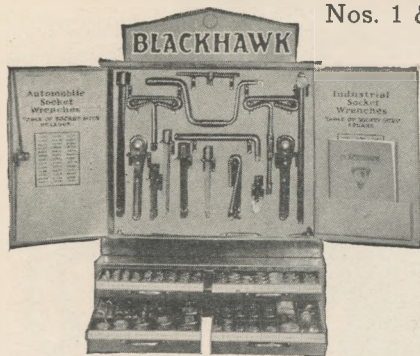
All these points mean more sales. Your customer is looking for a simple set of wrenches to handle every nut and bolt. Blackhawk provides him with just that.

When you see a "HEX" think of Blackhawk



BLACKHAWK

Nos. 1 & 1A Cabinets



No. 1 Stock Cabinet Contains WRENCH HANDLES AND PARTS

- Four No. T4 offset and T handles.
- Four No. T5 double end handles.
- Four No. 110X offset handles.
- Four No. T15 half speeder or crank handles.
- Four No. 3310 long T handles.
- Four No. 500 brace wrenches.
- Four No. 610 speeders, 19 $\frac{1}{2}$ in. overall.
- Four No. 911X ratchet handles, 10 in. long.
- Two No. T3 reversible ratchets.
- Four No. T60 extension bars, 6 in., with speed grip.
- Four No. T8 extension bars, 8 in. long.
- Four No. T10 extension bars, 10 in. long.
- Two No. T4X heavy duty sliding tee.
- Two No. T8X heavy duty extension bar, 8 $\frac{1}{2}$ in. long.
- Two No. T17X heavy duty extension bar, 17 in. long.

HEXAGON SOCKETS

- Six No. 14 hexagon sockets.
- Ten each Nos. 16, 18, 20 and 24 hexagon sockets.
- Six each Nos. 22 and 28 hexagon sockets.
- Five each Nos. 19, 25, 26 and 30 hexagon sockets.
- Three each Nos. 31, 34 and 36 hexagon sockets.
- Four No. 32 hexagon sockets.
- Two each Nos. 40, 36X, 40X, 44X, 46X, 48X, 50X and 52X hexagon sockets.

SQUARE SOCKETS

- Three each Nos. 012, 014, 016, 018 and 020 square sockets.
- Two each Nos. 019, 022, 024, 028, 032, 034 and 040 square sockets.

UNIVERSAL JOINTS

- Two each Nos. T16, T18, T20, T22 and T24 universal joints.
- One No. T28 universal joint.
- Three No. T2 universal joints.

ADAPTERS

- Two each Nos. T9 and T9X adapters.

TIE ROD SOCKETS

- Three No. T1 tie rod sockets.

VALVE GRINDER ATTACHMENTS

- Three No. T11 valve grinder attachments.

SPARK PLUG SOCKETS

- Two each Nos. 128, 130 and 136 spark plug sockets.

TOTAL CONTENTS—218 tools.

NOTE—Wrench sets for any car can be made up from the above cabinet assortments used in conjunction with our special steel wrench set boxes described on following pages. List of wrenches adaptable to the various makes of cars will be found in our Q. D. Wrench Manual, "A Set for Every Car."

The cabinet is all steel, beautifully lithographed in four colors. The lower part is arranged with drawers for sockets, as well as other items contained in cabinet.

This cabinet contains the most complete set of wrenches and combinations for garage or service station use, manufacturer or farmer.

Size of Cabinet: 28" High, 25 $\frac{1}{2}$ " Wide, and 11 $\frac{3}{4}$ " Deep.

No. 1A Stock Cabinet Contains

WRENCH HANDLES AND PARTS

- Three No. T4 offset and T handles.
- Two No. T5 double end handles.
- Two No. 110X offset handles.
- Two No. T15 half speeder or crank handles.
- Three No. 3310 long T handles.
- Two No. 500 brace wrenches.
- Two No. 610 speeders, 19 $\frac{1}{2}$ in. overall.
- Two No. 911X ratchet handles, 10 in. long.
- Two No. T60 extension bars, 6 in., with speed grip.
- One No. T3 reversible ratchet.
- Two No. T8X extension bars, 8 in. long.
- Two No. T10 extension bars, 10 in. long.
- One No. T4X heavy duty sliding tee.
- One No. T8X heavy duty extension bar, 8 $\frac{1}{2}$ in. long.
- One No. T17X heavy duty extension bar, 17 in. long.

HEXAGON SOCKETS

- Three No. 14 hexagon sockets.
- Six each Nos. 16, 20 and 24 hexagon sockets.
- Eight No. 18 hexagon sockets.
- Four No. 22 hexagon sockets.
- Three each Nos. 19, 25, 26 and 28 hexagon sockets.
- Two each Nos. 30, 31, 32 and 34 hexagon sockets.
- One each Nos. 36, 40, 36X, 40X, 44X, 46X, 48X, 50X and 52X hexagon sockets.

SQUARE SOCKETS

- One each Nos. 012, 014, 016, 019, 022, 024, 028, 034 and 040 square sockets.
- Two each Nos. 018 and 020 square sockets.

UNIVERSAL JOINTS

- One each Nos. T16, T18 and T20 universal joints.
- Two No. T2 universal joints.

ADAPTERS

- One No. T9 and T9X adapters.

TIE ROD SOCKETS

- One No. T1 tie rod socket.

VALVE GRINDER ATTACHMENTS

- Two No. T11 valve grinder attachments.

SPARK PLUG SOCKETS

- One each Nos. 128, 130 and 136 spark plug sockets.

TOTAL CONTENTS—116 tools.

BLACKHAWK MANUFACTURING CO., MILWAUKEE

BUICK

CADILLAC

CHANDLER

CHEVROLET

CHRYSLER

CLEVELAND

DODGE

ESSEX

FORD

HUDSON

HUP-MOBILE

JEWETT

NASH

OAKLAND

OLDS-MOBILE

OVERLAND

PACKARD

PAIGE

REO

RICKENBACKER

STAR

STUDEBAKER

WILLYS-KNIGHT



When you see a "HEX" think of Blackhawk

BLACKHAWK

No. 2 STOCK CABINET ASSORTMENT
QUICK DETACHABLE WRENCHES



An Inexpensive Merchandiser

This cabinet was especially designed to meet the demand for an inexpensive assortment of wrenches containing all the most popular sizes of sockets and Q. D. Handles.

Every hardware, accessory and parts dealer will find this merchandiser a real profit making silent salesman. Sets of wrenches or individual wrenches can be made up for mechanics or for any car. "Wrench Manual" furnished with cabinet tells you just what size is required for every bolt or nut on any car.

Table of socket sizes listed on the inside panel of one door, and a quick reference price chart on the other. No time wasted making sales. Complete in every detail.

All steel cabinet, beautifully lithographed in three colors. Size is $19\frac{3}{4}$ " high, $16\frac{1}{4}$ " wide and $8\frac{3}{4}$ " deep. Each drawer compartment is labeled in front showing contents.

CONTENTS

HANDLES AND ATTACHMENTS

- Four No. T4 offset and T handles.
- Four No. T5 double end handles.
- Four No. 110X offset handles.
- Four No. 3310 long T handles.
- Four No. 500 brace wrenches.
- Two No. 911X ratchet wrenches, 10 in. long.
- Two No. T13 ratchet wrench lugs.
- Two No. T2 Universal Joints.
- Three No. T11 valve grinder attachments.
- Two No. T10 extension bars, 10 in. long.
- Two No. T60 extension bars, 6 in. width speed grip.

HEXAGON SOCKETS

- Eight Nos. 18 and 20.
- Six Nos. 16, 22 and 24.
- Four No. 14.
- Three Nos. 26 and 28.
- Two Nos. 19, 25, 30 and 32.

SQUARE SOCKETS

- Three No. 018.

No. 2 Stock Cabinet Assortment—Contains 88 tools. Weight of wrenches 54 lbs. Weight of cabinet 16 lbs. List complete. . \$50.00

BLACKHAWK MANUFACTURING CO., MILWAUKEE

When you see a "HEX" think of Blackhawk



BLACKHAWK Q. D. WRENCHES

BLACKHAWK HANDLES are made of special steel. All attachments and sockets are heat treated wherever necessary. Notice their husky appearance and tough black baked on finish. Each tool perfectly balanced.

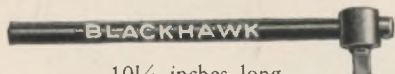


Q. D. TEE HANDLE

12 inches long
With Speed Grip

No. 3310.....\$1.00

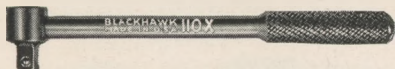
SLIDING TEE HANDLE



10 $\frac{1}{4}$ inches long

No. T4.....\$0.60

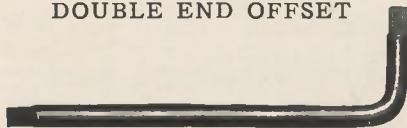
OFFSET HANDLE



With Knurled Grip
10 $\frac{9}{16}$ inches long

No. 110X.....\$0.90

DOUBLE END OFFSET



3x10 inches long

No. T5.....\$0.60

HALF SPEEDER OR CRANK HANDLE



No. T15.....\$1.00

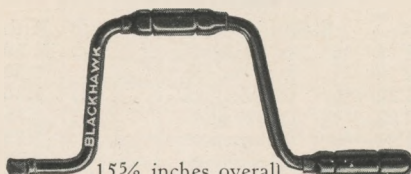
**RATCHET WRENCH
TO REVERSE-SHIFT LUG**



10 inches long

No. 911X.....\$2.75

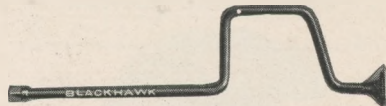
BRACE HANDLE



15 $\frac{3}{8}$ inches overall

No. 500.....\$1.20

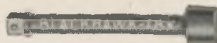
SPEEDER HANDLE



19 inches long

No. 610.....\$1.05

**HEAVY DUTY EXTENSION
BARS**



8 $\frac{1}{2}$ inches long

No. T8X.....\$1.20



17 inches long

No. T17X.....\$1.40

**HEAVY DUTY SLIDING TEE
HANDLE**



18 inches long

No. T4X.....\$1.50

BLACKHAWK MANUFACTURING CO., MILWAUKEE

BUICK

CADIL-
LAC

CHAND-
LER

CHEVRO-
LET

CHRYSL-
ER

CLEVEL-
AND

DODGE

ESSEX

FORD

HUDSON

HUP-
MOBILE

JEW TT

NASH

OAK-
LAND

OLDS-
MOBILE

OVER-
LAND

PACK-
ARD

PAIGE

REO

RICKEN-
BACKER

STAR

STUDE-
BAKER

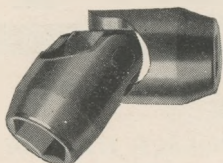
WILLYS-
KNIGHT



When you see a "HEX" think of Blackhawk

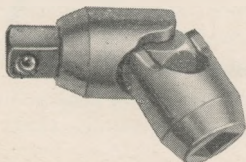
BLACKHAWK Q. D. ATTACHMENTS

Q. D. UNIVERSAL JOINT SOCKETS



No.	Socket Sizes	Each
T16	1/2 in. hexagon.....	\$1.50
T18	9/16 in. hexagon.....	1.50
T20	5/8 in. hexagon.....	1.50
T22	11/16 in. hexagon.....	1.75
T24	3/4 in. hexagon.....	1.75
T26	13/16 in. hexagon.....	1.75
T28	7/8 in. hexagon.....	1.75

UNIVERSAL JOINTS



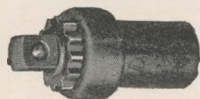
No. T2.....	\$1.65
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SPARK PLUG SOCKETS



No. 128	7/8" hexagon plugs.....	\$0.65
No. 130	1/2" (Ford size).....	.65
No. 136	1 1/8" hexagon plugs.....	.75

Q. D. RATCHETS



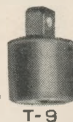
No. T3.....	\$2.25
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SOCKET ADAPTERS

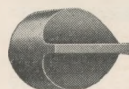


No. T9X—Adapter for heavy duty sockets to standard 1/2 in. handles.	Each	\$0.50
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No. T9—Adapter for standard 1/2 in. sockets to 3/4 in. heavy duty handles.	Each	\$0.50
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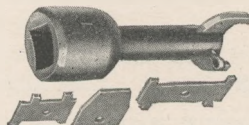


DRAG LINK ADJUSTING WRENCH



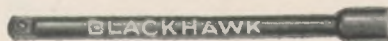
No. T1—Tie rod or drag link adjusting wrench	Each	\$0.50
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VALVE GRINDER ATTACH- MENTS

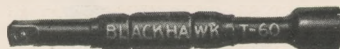


No. T11.....	\$0.50
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Q. D. EXTENSION BARS



Nos.	Length	Weight	Each
T6	6 in.	7 oz.	\$0.65
T8	8 in.	10 oz.	.70
T10	10 in.	13 oz.	.75



With Speed Grip

Nos.	Length	Weight	Each
T60	6 in.	12 oz.	\$0.75
T80	8 in.	15 oz.	.80
T100	10 in.	1 lb. 2 oz.	.85

BLACKHAWK MANUFACTURING CO., MILWAUKEE

When you see a "HEX" think of Blackhawk



BLACKHAWK Q. D. WRENCHES

MADE FROM SOLID STEEL BARS HEAT TREATED AND HARDENED
NOTE TAPER

STANDARD HEX SOCKETS

Q. D.

½" Sq. Handle Openings

Table of Standard Hex Sockets

Socket No.	Socket Size	U.S. Nuts and Bolts	Hex. Hd. Cap Screws U. S. Std.	S.A.E. Std. Nuts and Cap Screws	Mfg. Std. Bolt Hds.	Coach Screws	List Price
14	7-16		1-4	1-4	1-4		.30
16	1-2	1-4	5-16	5-16			.30
18	9-16		3-8	3-8		3-8	.30
19	19-32	7-16					.30
20	5-8		7-16	7-16	3-8		.30
22	11-16	3-8					.30
24	3-4		1-2	1-2		1-2	.40
25	25-32	7-16					.40
26	13-16		9-16		1-2		.40
28	7-8	1-2	5-8	9-16			.40
30	15-16			5-8		5-8	.50
31	31-32	9-16					.50
*32	1		3-4	11-16	5-8		.50
*34	1:1-16	5-8		3-4			.65
36	1:1-8		7-8			3-4	.65
40	1:1-4	3-4	1	7-8			.65

*Nos. 32, 34 can be furnished with ¼-inch opening at same list price add X to number.

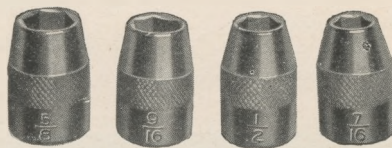
STANDARD SQUARE SOCKETS

Q. D.

¾" Sq. Handle Openings

Table of Square Sockets

Socket No.	Socket Size	U. S. Nuts and Bolts	U. S. S. Cap Screws	Square Head Set Screws	Coach Screws	List Price
012	3-8		1-4	3-8	1-4	.30
014	7-16		5-16	7-16		.30
016	1-2	1-4	3-8	1-2		.35
018	9-16		7-16	9-16	3-8	.35
019	19-32	5-16				.40
020	5-8		1-2	5-8		.40
022	11-16	3-8	9-16			.40
024	3-4		5-8	3-4	1-2	.50
025	25-32	7-16				.50
026	13-16					.50
028	7-8	1-2	3-4	7-8		.60
030	15-16				5-8	.60
032	1	9-16		1		.60
034	1:1-16	5-8				.70
040	1:1-4	3-4	1	1:1-4		.80



HEAVY DUTY SOCKETS

Q. D.

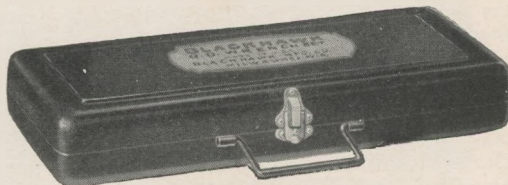
¾" Sq. Handle Openings

Sockets are interchangeable with Std. or Extra Heavy Duty Sockets or Handles by use of Adapters

Table of Heavy Duty Hex. Sockets

Socket No.	Socket Size	U. S. Nuts and Bolts	Hex. Hd. Cap Screws U. S. Std.	S.A.E. Std. Nuts and Cap Screws	Mfg. Std. Bolt Hds.	Coach Screws	List Price
36x	1:1-8		7-8			3-4	.70
38x	1:3-16				3-4		.70
40x	1:1-4	3-4	1	7-8			.70
44x	1:3-8		1:1-8		7-8		.80
46x	1:7-16	7-8		1			.80
48x	1:1-2		1:1-4			1	1.00
50x	1:9-16				1		1.00
52x	1:5-8	1		1:1-8			1.20

METAL CASES FOR Q. D. WRENCH SETS



No. A—16 in. long, 6¾ in. wide, 2½ in. high. For car owners' sets and No. 18A set. . \$2.50

No. B—19½ in. long, 5½ in. wide, 2½ in. high. For No. 35B heavy duty set. 2.50

No. C—19⅞ in. long, 8⅜ in. wide, 2½ in. high. For all Q. D. service sets and Nos. 22C and 32C. 3.00

No. D—23½ in. long, 11 in. wide, 2½ in. high. For No. 43D large service sets. 6.00

Finished in bright black baked enamel.

BLACKHAWK MANUFACTURING CO., MILWAUKEE

BUICK

CADILLAC

CHANDLER

CHEVROLET

CHRYSLER

CLEVELAND

DODGE

ESSEX

FORD

HUDSON

HUP-MOBILE

JEWETT

NASH

OAKLAND

OLDS-MOBILE

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RICKENBACKER

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WILLYS-KNIGHT

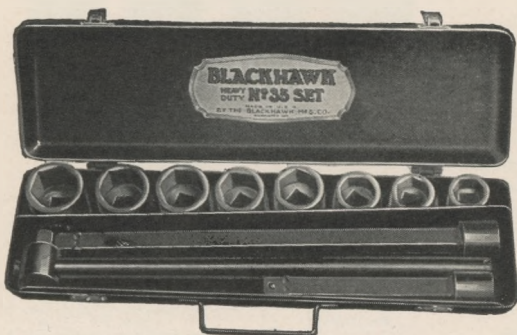


When you see a "HEX" think of Blackhawk

Blackhawk Q. D. Metal Case Sets

These sets can be made up from your cabinet assortment. Your jobber can supply you with steel cases.

NO. 35B HEAVY DUTY SET



Heavy duty socket and handles for industrial use, trucks, tractors, farm engines and machinery.

Every garage should have one of these sets, especially for wheel, drive shaft, axle shaft and steering arm nuts. Case is made of 20 gauge steel.

Contents of Set

One No. T4X sliding tee handle, 19 in. long, bar made from $\frac{1}{8}$ in. stock with $\frac{3}{4}$ in. square shank on sliding socket adapter.

One No. T8X extension bar, 8 $\frac{1}{2}$ in. long.

One No. T17X extension bar, 17 in. long.

Eight hexagon sockets, sizes 1 $\frac{1}{8}$ to 1 $\frac{5}{8}$ in., Nos. 36X, 38X, 40X, 44X, 46X, 48X, 50X and 52X.

No. 35 Set—Complete in Wooden Box.....\$11.00

No. 35B Set—Complete in Metal Case No. B..... 12.95

No. 36B Set—(Same as No. 35B plus Heavy Duty Ratchet No. 916)..... 19.15

Weight Per Set 20 $\frac{1}{2}$ lbs.

NO. 32C SET

Set contains 32 tools. A very complete set for garage use. Will give the mechanic the range of sizes and types of handles he needs for almost any kind of work.

Contents of Set

One No. 911X ratchet handle.

One No. 610 speeder handle.

One No. 500 brace handle.

One No. T10 extension bar.

One No. T60 extension bar with speed grip.

One No. T15 half speeder handle.

One No. T4 sliding tee.

One No. 3310 tee handle with speed grip.

One No. T11 valve grinder attachments.

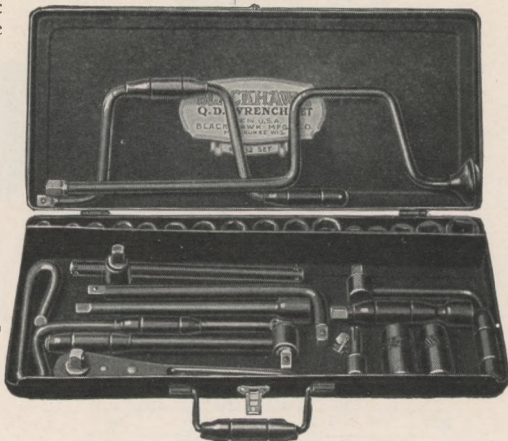
One No. 110X offset handle.

One No. T1 tie rod socket.

One each Nos. 012, 014, 016, 018 and 020 square sockets.

One each Nos. 14, 16, 18, 19, 20, 22, 24, 25, 26, 28, 30, 31, 32 and 34 hexagon sockets.

One each Nos. 130 and 136 spark plug sockets.



No. 32C Set—Complete in Metal Case No. C.....\$21.65

Weight Per Set 23 $\frac{1}{2}$ lbs.

BLACKHAWK MANUFACTURING CO., MILWAUKEE

When you see a "HEX" think of Blackhawk



Blackhawk Q. D. Metal Case Sets

NO. 43D SET



Contents of Set

Set contains 43 tools. A superior service set of Q. D. wrenches. Made up by combining No. 32 regular service set and No. 35 heavy duty set and all tools contained in Nos. 32 and 35 sets are included in the contents of No. 43 set.

With this set the mechanic has every necessary tool for working on all automobiles and largest trucks.

No. 43D Set—Complete in Metal
Case No. D.....\$35.00

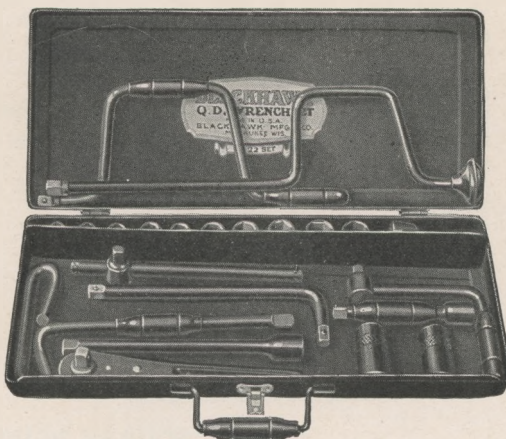
Weight Per Set 48½ lbs.

NO. 22C SET

Set contains 22 tools, covering complete range of handles and 10 popular sizes of hexagon sockets. Especially adapted for mechanics.

Contents of Set

- One No. 911X ratchet handle.
- One No. 610 speeder handle.
- One No. 500 brace handle.
- One No. T5 offset handle.
- One No. T10 extension bar.
- One No. T60 speed grip extension bar.
- One No. T15 half speeder handle.
- One No. T4 sliding tee.
- One No. 3310 tee handle with speed grip.
- One No. T11 valve grinder attachment.
- One each Nos. 130 and 136 spark plug sockets.
- One each Nos. 14, 16, 18, 19, 20, 22, 24, 25, 26 and 28 hexagon sockets.



No. 22C Set—Complete, packed in Metal Case No. C.....\$17.25

Weight Per Set 21 lbs.

BLACKHAWK MANUFACTURING CO., MILWAUKEE



When you see a "HEX" think of Blackhawk

Blackhawk Q. D. Metal Case Sets

NO. 18A SET



Set contains 18 tools. A very handy compact set of Q. D. wrenches, handles and sockets for mechanics. Also makes a very compact set for car owner who makes his own repairs.

Contents of Set

One No. 911X ratchet handle.
One No. T4 sliding tee and offset handle.
One No. T15 half speeder handle.
One No. T60 extension bar with speed grip.
One No. T10 extension bar.
One No. 500 brace handle.
One each Nos. 128 and 130 spark plug sockets.
One each Nos. 14, 16, 18, 19, 20, 22, 24, 25, 26 and 28 hexagon sockets.

No. 18A Set—Complete, packed in Metal Case No. A.....\$13.75
Weight 15 lbs.

DRAIN PLUG SERVICE SET

NO. 23G SET

Sockets will fit a wide range of cars. For removing plugs to drain crank cases, also for drain and refill plugs in transmission and differential housings. Sliding bar handle can be used as a tee or offset.

Very essential in all oil and gasoline service stations.

Contents of Set

One No. T4 sliding handle.
One No. T6 extension bar.
One No. T1 attachment for drain plugs with slots.
One each hexagon sockets, Nos. 16, 24, 30, 32, 34 and 36.
One each square sockets, Nos. 014, 016, 018, 020, 022, 024 and 028.
One each square plugs, Nos. 710, 712, 714, 716, 718, 720 and 724.

Per Set

No. 23G Set—Complete in Steel Case
No. G.....\$12.20

Weight Per Set 10½ lbs.



SQUARE PLUGS ONLY

For No. 23G Set

Nos.	710	712	714	716	718	720	724
Inches	5/16	3/8	7/16	1/2	9/16	5/8	3/4
Each	\$0.40	.40	.40	.40	.40	.40	.40

BLACKHAWK MANUFACTURING CO., MILWAUKEE

When you see a "HEX" think of Blackhawk



GENERAL

CAR OWNER'S SET

For all cars not individually listed in the following pages this set has been found to be highly satisfactory.

	Each
No. 16 1/2" hexagon socket	\$0.30
No. 18 5/8" hexagon socket .....	.30
No. 20 3/8" hexagon socket .....	.30
No. 22 1 1/8" hexagon socket .....	.30
No. 24 3/4" hexagon socket .....	.40
No. 28 7/8" hexagon socket .....	.40
No. T-4 Offset and Tee.....	.60
No. T-5 Double end handle.....	.60
No. T-10 10" extension bar .....	.75
No. 3310 12" Tee handle	1.00
No. 500 Brace	1.20
Set complete	\$6.15

Canvas Bag, 50c Extra

Cars for Which This Set Is Especially Recommended Are Listed Below

Auburn	Lincoln
Durant	Marmon
Flint	Moon
Franklin	Peerless
Gardner	Pierce-Arrow
Gray	Stearns-Knight
Jordan	Stutz
Kissel	Velie
Lexington	Wills Ste. Claire

BLACKHAWK MANUFACTURING CO., MILWAUKEE

BUICK
CADILLAC
CHANDLER
CHEVROLET
CHRYSLER
CLEVELAND
DODGE
ESSEX
FORD
HUDSON
HUP-MOBILE
JEWETT
NASH
OAKLAND
OLDS-MOBILE
OVERLAND
PACKARD
PAIGE
REO
RICKENBACKER
STAR
STUDEBAKER
WILLYS-KNIGHT



When you see a "HEX" think of Blackhawk

BUICK "MASTER SIX" OWNER'S SET

With this assortment of Sockets and Handles the Buick owner saves time and trouble—he has a tool for every bolt and nut on his car.

INTERCHANGEABLE SOCKET WRENCHES

No. 16— $\frac{1}{2}$ "	Hex. Socket.....	\$0.30
No. 18— $\frac{5}{8}$ "	Hex. Socket.....	.30
No. 20— $\frac{3}{4}$ "	Hex. Socket.....	.30
No. 22— $\frac{1}{2}$ "	Hex. Socket.....	.30
No. 24— $\frac{3}{4}$ "	Hex. Socket.....	.40
No. T-4	Offset and T Handle.....	.60
No. T-5	Double End Handle.....	.60
No. T-10	10" Extension Bar.....	.75
No. 3310	12" T Handle.....	1.00
No. 500	Brace	1.20
Set Complete		\$5.75

Canvas Bag 50c Extra

WRENCH SPECIFICATIONS FOR WORK ON BUICK CARS BUICK MASTER MODEL 1924-25

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
BODY PARTS	Body to frame	$\frac{5}{8}$ sq.....	.020
BRAKES	Brake intermediate lever nut (front)	1 $\frac{1}{16}$	34
	Brake rod lever nut	$\frac{1}{16}$	18
	Brake cross shaft bracket	$\frac{1}{2}$	16
	Brake band adjustment nut	$\frac{3}{4}$	24
CARBURETOR	Carburetor to intake	$\frac{3}{16}$	103
CLUTCH	Clutch adjusting nut	$\frac{3}{4}$	24
	Clutch assembly nut	$\frac{1}{2}$	16
	Clutch stud nut	$\frac{5}{8}$	20
FAN	Fan pulley nut	1 $\frac{1}{4}$	40X
	Fan bracket bolts	$\frac{3}{8}$	18
FENDERS	Front fender bracket to frame	$\frac{1}{2}$	16
	Front fender to frame	$\frac{1}{2}$	16
	Rear fender to body	$\frac{1}{2}$	16
FRONT AXLE	Steering knuckle	1 $\frac{3}{8}$	44X
	Steering knuckle tie rod bolt nut	1 $\frac{1}{2}$	34
	Steering knuckle lever bolt nut	1 $\frac{1}{2}$	34
	Drag link plug		T1
GENERATOR	Generator screws	$\frac{5}{8}$	20
HEAD LAMPS	Head lamp bracket to fender	$\frac{3}{16}$	18
	Head lamp to bracket	$\frac{3}{8}$	102
	Head lamp tie rod bolt	$\frac{1}{2}$	18
MOTOR	Cylinder head bolts	$\frac{5}{8}$	2020
	Cylinder block to crank case	$\frac{3}{4}$	T24
	Valve rocker shaft bracket	$\frac{1}{2}$	18
	Connecting rod nut	$\frac{3}{16}$	18
	Main bearing nut	$\frac{3}{4}$	24
	Oil pan	$\frac{1}{2}$	16
	Oil pump	$\frac{1}{2}$	16
	Timer gear cover	$\frac{3}{16}$	18
	Water inlet to cylinder	$\frac{1}{16}$	18
	Water outlet to cylinder	$\frac{1}{2}$	16
	Water pump clamp bolt	$\frac{3}{8}$	18
	Intake manifold to cylinder	$\frac{1}{16}$	103
	Exhaust manifold to cylinder	$\frac{1}{16}$	103
	Flywheel cap screws	$\frac{3}{8}$	18
	Pump shaft bearing	$\frac{3}{8}$	18
	Engine shield	$\frac{1}{2}$ sq.....	016
	Exhaust manifold to heater	$\frac{3}{8}$	18
	Motor support bolt (rear)	1 $\frac{1}{2}$	30
	Motor support bolt (front)	$\frac{5}{8}$	20

BLACKHAWK MANUFACTURING CO., MILWAUKEE

When you see a "HEX" think of Blackhawk



WRENCH SPECIFICATIONS FOR WORK ON BUICK CARS—Continued
BUICK MASTER MODEL 1924-25

	Part Name	Size across Flats on Nuts	Blackhawk Socket No
MUFFLER	Muffler to bracket	$\frac{9}{16}$	18
RADIATOR	Radiator to frame	$\frac{9}{16}$	18
REAR AXLE	Rear axle housing cover	$\frac{5}{8}$	20
	Rear axle bumper bracket bolt	$\frac{5}{8}$	20
	Differential housing bolts	$\frac{5}{8}$	20
	Differential bearing clamp nut	$\frac{1}{2}$	22
	Differential carrier cap bolt nut	$\frac{1}{2}$	26
	Differential case	$\frac{5}{8}$	20
	Drive pinion nut	$1\frac{1}{4}$	40X
	Rear axle tie rod nut	$\frac{7}{8}$	28
	Drive shaft nut	$1\frac{1}{8}$	58X
	Universal housing	$\frac{1}{2}$	18
RUNNING BOARD	Running board to support	$\frac{7}{16}$ sq.....	.014
	Running board to fender	$\frac{1}{2}$ sq.....	.016
SPRING	Front spring shackle bolt (front)	$\frac{1}{2}$	30
	Front spring shackle bolt (rear)	$1\frac{1}{4}$	36
	Front spring clamp bolt	$\frac{7}{8}$	16
	Front spring clip nut	$\frac{1}{2}$	30
	Rear spring shackle bolt	$\frac{7}{8}$	28
	Rear spring clamp bolts	$\frac{5}{8}$	20
	Rear spring clip nut	$1\frac{1}{2}$	34X
	Rear spring hanger nut	$\frac{1}{2}$	30
	Rear spring hanger to spring	$\frac{7}{8}$	28
	Rear spring hanger clamp to axle	$\frac{5}{8}$	20
STARTER	Starter cross shaft bracket	$\frac{9}{16}$	18
STEERING GEAR	Steering gear clamp bolt	$\frac{3}{4}$	24
TRANSMISSION	Transmission housing to block	$\frac{1}{2}$	18
	Transmission cover (gear housing)	$\frac{1}{2}$	18
	Transmission main drive shaft bearing cover (rear)	$\frac{5}{8}$	20
WHEELS	Rear wheels hub nut	$\frac{1}{2}$	30
	Rim nut	$\frac{3}{4}$	24

BLACKHAWK MANUFACTURING CO., MILWAUKEE

BUICK

CADIL-
LAC

CHAND-
LER

CHEVRO-
LET

CHRYSL-
ER

CLEVE-
LAND

DODGE

ESSEX

FORD

HUDSON

HUP-
MOBILE

JEW TT

NASH

OAK-
LAND

OLDS-
MOBILE

OVER-
LAND

PACK-
ARD

PAIGE

REO

RICKEN-
BACKER

STAR

STUDE-
BAKER

WILLYS-
KNIGHT



When you see a "HEX" think of Blackhawk

BUICK "STANDARD SIX" OWNER'S SETS

With this assortment of Sockets and Handles the Buick owner saves time and trouble—he has a tool for every bolt and nut on his car.

INTERCHANGEABLE SOCKET WRENCHES

No. 16— $\frac{1}{2}$ " Hex. Socket.....	\$0.30
No. 18— $\frac{9}{16}$ " Hex. Socket.....	.30
No. 20— $\frac{5}{8}$ " Hex. Socket.....	.30
No. 22— $\frac{11}{16}$ " Hex. Socket.....	.30
No. 24— $\frac{3}{4}$ " Hex. Socket.....	.40
No. T-4—Offset and T Handle.....	.60
No. T-5—Double End Handle.....	.60
No. T-10—10" Extension Bar.....	.75
No. 3310—12" T Handle.....	1.00
No. 500—Brace	1.20
Set Complete	\$5.75
Canvas Bag 50c Extra	

WRENCH SPECIFICATIONS FOR WORK ON BUICK CARS STANDARD MODEL 1924-1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
BODY PARTS	Body to frame	$\frac{5}{8}$ sq.....	.020
BRAKES	Brake intermediate lever nut (front)	1 $\frac{1}{8}$	34
	Brake rod lever nut	$\frac{7}{8}$	18
	Brake cross shaft bracket bolt and nut	$\frac{1}{2}$	16
	Brake band adjusting nut	$\frac{3}{4}$	24
CARBURETOR	Carburetor to intake cap screw	$\frac{3}{8}$	18
	Carburetor heater to exhaust cap screw.....	$\frac{1}{8}$	18
CLUTCH	Clutch assembly nut	$\frac{1}{2}$	16
	Clutch stud nut	$\frac{5}{8}$	20
FAN	Fan bracket bolt and nut	$\frac{3}{8}$	18
FENDERS	Front fender bracket to frame	$\frac{1}{2}$	16
	Front fender to frame bolts	$\frac{1}{2}$	16
	Rear fender to body bolts	$\frac{1}{2}$	16
FRONT AXLE	Steering knuckle nut	1 $\frac{1}{4}$	40X
	Steering knuckle tie rod bolt and nut	$\frac{3}{4}$	28
	Steering knuckle lever nut	1 $\frac{1}{8}$	34
	Drag link plug		T1
GENERATOR	Generator cap screws	$\frac{5}{8}$	20
HEAD LAMPS	Head lamp bracket to fender bolt and nuts	$\frac{3}{8}$	18
	Head lamp to bracket nut	$\frac{3}{4}$	102
	Head lamp tie rod bolt and nut	$\frac{3}{8}$	18
MOTOR	Cylinder head bolts	$\frac{5}{8}$	2020X
	Cylinder block to crank case stud nut	$\frac{5}{8}$	20
	Valve rocker shaft bracket stud nut	$\frac{1}{8}$	18
	Connecting rod nut	$\frac{1}{8}$	18
	Main bearing stud nut	$\frac{3}{4}$	18
	Oil pan cap screw	$\frac{1}{2}$	16
	Oil pump cap screw	$\frac{1}{2}$	16
	Timing gear cover cap screws	$\frac{1}{2}$	16
	Water inlet to cylinder cap screws	$\frac{1}{2}$	16
	Water outlet to cylinder cap screws	$\frac{1}{2}$	16
	Water pump clamp bolt	$\frac{1}{8}$	18
	Intake manifold to cylinder stud nut	$\frac{3}{8}$	103
	Exhaust manifold to cylinder stud nut	$\frac{3}{8}$	103
	Flywheel cap screws	$\frac{1}{8}$	18

BLACKHAWK MANUFACTURING CO., MILWAUKEE

When you see a "HEX" think of Blackhawk



WRENCH SPECIFICATIONS FOR WORK ON BUICK CARS—Continued
STANDARD MODEL 1924-1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No
MOTOR (Cont'd)	Pump shaft bearing bolt	$\frac{1}{2}$	18
	Engine shield bolt and nut	$\frac{1}{2}$ sq.	.016
	Exhaust manifold to heater bolt and nut	$\frac{1}{2}$	18
	Motor drain plug	$\frac{1}{2}$	24
	Valve cover stud nuts	$\frac{3}{8}$	24
	Motor support bolt and nut (rear)	$\frac{1}{2}$	30
	Motor support bolt and nut (front)	$\frac{1}{2}$	18
	Motor support clamp bolt and nut	$\frac{1}{2}$	18
MUFFLER	Muffler to bracket bolt and nut	$\frac{1}{2}$	16
RADIATOR	Radiator to frame stud nut	$\frac{1}{8}$	18
REAR AXLE	Rear axle housing cover cap screw	$\frac{5}{8}$	20
	Rear axle bumper bolt	$\frac{5}{8}$	20
	Differential housing bolt	$\frac{5}{8}$	20
	Differential bearing clamp bolt and nut	$\frac{1}{2}$	22
	Differential carrier cap stud nut	$\frac{1}{2}$	26
	Differential case cap screws	$\frac{5}{8}$	20
	Drive pinion nut	$1\frac{1}{4}$	40X
	Rear axle tie rod nut	$\frac{7}{8}$	28
	Drive shaft nut	$1\frac{1}{2}$	46X
	Universal housing bolt nut	$\frac{3}{2}$	16
	Rear axle drain plug	$\frac{3}{4}$	24
RUNNING BOARD	Running board to support	$\frac{7}{8}$ sq.	.014
SPRING	Front spring shackle bolt nut	$\frac{7}{8}$	28
	Front spring clamp bolt and nut	$\frac{1}{2}$	16
	Front spring clip nut	$\frac{1}{8}$	30
	Rear spring shackle bolt nut	$\frac{7}{8}$	28
	Rear spring clamp bolt and nut	$\frac{5}{8}$	20
	Rear spring clip nut	$\frac{1}{8}$	30
	Rear spring clip bracket stud nut	$\frac{3}{4}$	24
	Rear spring hanger nut	$\frac{1}{2}$	30
	Rear spring hanger to spring bolt nut	$\frac{7}{8}$	28
	Rear spring hanger clamp to axle bolt and nut....	$\frac{5}{8}$	20
STARTER	Starter cross shaft bracket cap screws	$\frac{1}{2}$	16
STEERING GEAR	Steering gear clamp bolt	$\frac{3}{4}$	24
	Steering gear post clamp bolt and nut	$\frac{1}{2}$	16
	Steering gear post clamp to housing cap screws....	$\frac{1}{2}$	16
	Steering post cowl bracket cap screw	$\frac{1}{2}$	16
TRANSMISSION	Transmission housing to block cap screws	$\frac{1}{2}$	18
	Transmission cover to gear housing cap screw....	$\frac{1}{8}$	18
	Transmission main drive shaft bearing cover cap screw (rear)	$\frac{5}{8}$	20
	Transmission drain plug	$\frac{1}{8}$ sq.	.014
	Transmission filler plug	$\frac{5}{8}$ sq.	.020
WHEELS	Rim nut	$\frac{3}{4}$	24

BLACKHAWK MANUFACTURING CO., MILWAUKEE

BUICK

CADIL-
LAC

CHAND-
LER

CHEVRO-
LET

CHRYSL-
LER

CLEVE-
LAND

DODGE

ESSEX

FORD

HUDSON

HUP-
MOBILE

JEW TT

NASH

OAK-
LAND

OLDS-
MOBILE

OVER-
LAND

PACK-
ARD

PAIGE

REO

RICKEN-
BACKER

STAR

STUDE-
BAKER

WILLYS-
KNIGHT



When you see a "HEX" think of Blackhawk

CADILLAC OWNER'S SET

With this assortment of Sockets and Handles the Cadillac owner saves time and trouble—he has a tool for every bolt and nut on his car.

INTERCHANGEABLE SOCKET WRENCHES

No. 16— $\frac{1}{4}$ "	Hex. Socket.....	\$0.30
No. 18— $\frac{5}{16}$ "	Hex. Socket.....	.30
No. 20— $\frac{3}{8}$ "	Hex. Socket.....	.30
No. 22— $\frac{1}{2}$ "	Hex. Socket.....	.30
No. 24— $\frac{3}{4}$ "	Hex. Socket.....	.40
No. 28— $\frac{7}{8}$ "	Hex. Socket.....	.40
No. 30— $1\frac{1}{8}$ "	Hex. Socket.....	.50
No. T-2—	Universal Joint	1.65
No. T-5—	Double End Handle.....	.60
No. T-10—	10" Extension Bar.....	.75
No. 3310—	12" T Handle.....	1.00
No. 500—	Brace	1.20
Set Complete		\$7.70

Canvas Bag 50c Extra

WRENCH SPECIFICATIONS FOR WORK ON CADILLAC CARS MODEL V-63 1924-1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
BODY PARTS	Body to frame bolt nut	$\frac{3}{4}$	24
	Dash to body bolt	$\frac{1}{2}$	16
BATTERY	Battery box to frame bolt	$\frac{1}{2}$	18
	Battery box to bracket bolt	$\frac{1}{2}$	16
BRAKES	Brake band support bracket	$\frac{1}{2}$	18
	Brake band support stud nut	$1\frac{1}{16}$	34
	Brake adjustment support nut	$\frac{5}{8}$	20
	Brake equalizing cross shaft bracket bolt	$\frac{5}{8}$	20
	Foot brake intermediate lever bolt	$\frac{1}{2}$	18
	Foot brake intermediate lever bracket bolt	$\frac{1}{2}$	18
	Foot brake rear lever bracket bolts	$\frac{1}{2}$	18
	Foot brake rear lever nut	$\frac{1}{2}$	18
	Hand brake rack to case	$\frac{1}{2}$	18
	Front brake housing bolt	$\frac{1}{2}$	18
CARBURETOR	Carburetor to manifold bolts	$\frac{1}{2}$	22
	Carburetor to heater	$\frac{1}{2}$	16
CLUTCH	Clutch connection nut	$1\frac{1}{4}$	40X
	Clutch bracket to case bolt	$\frac{1}{2}$	18
	Clutch lever bolt	$\frac{1}{2}$	18
	Clutch plate retainer stud nut	$\frac{1}{2}$	18
FAN	Clutch housing to flywheel cap screws	$\frac{9}{16}$	18
	Fan stud	1	32
FENDERS	Front fender to frame bolt	$\frac{1}{2}$	16
	Front fender to running board	$\frac{1}{2}$	18
	Front fender brace	$\frac{1}{2}$	30
	Rear fender to running board	$\frac{1}{2}$	18
FRONT AXLE	Rear fender to body	$\frac{5}{8}$	20
	Steering knuckle lever nut	$\frac{1}{2}$	30
	Steering knuckle nut	$1\frac{1}{2}$	48X
	Steering tie rod clevis bolt	$\frac{1}{2}$	18
GASOLINE TANK	Drag link plug		T1
	Gasoline filler pipe bolt	$\frac{1}{2}$	16
	Gasoline tank support stud nut	$\frac{3}{4}$	24

BLACKHAWK MANUFACTURING CO., MILWAUKEE

When you see a "HEX" think of Blackhawk



WRENCH SPECIFICATIONS FOR WORK ON CADILLAC CARS—Continued
MODEL V-63 1924-1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
GENERATOR	Generator support bolt	$\frac{3}{8}$	24
HEAD LAMPS	Head lamp stud nut	$1\frac{1}{8}$	36
	Head lamp tie rod bracket nut and bolt	$\frac{5}{8}$	20
	Head lamp tie rod nut	$\frac{5}{8}$	20
MISCELLANEOUS	Tool box bracket to frame bolt and nut	$\frac{3}{8}$	18
	Tool box to bracket bolt and nut	$\frac{1}{2}$	16
	Tire rack bolt	$\frac{1}{8}$	18
MOTOR	Connecting rod stud nut	$\frac{1}{2}$	16
	Cylinder to base bolt	$\frac{7}{8}$	T20
	Cylinder head bolts	$\frac{1}{8}$	22
	Exhaust manifold to cylinder block stud nut	$\frac{1}{8}$	18
	Exhaust manifold to pipe bolt and nut	$\frac{1}{8}$	18
	Flywheel to crank shaft stud nut	$\frac{3}{8}$	28
	Intake manifold to cylinder stud nut	$\frac{1}{8}$	18
	Main bearing stud nut	$\frac{3}{8}$	28
	Motor support bolt and nut (front)	$\frac{3}{8}$	24
	Oil pan bolt	$\frac{3}{8}$	20
	Oil pan drain plug	$1\frac{1}{8}$	34
	Rocker shaft cover bolts	$\frac{1}{8}$	T18
	Thermostat to water pump cap screw	$\frac{1}{8}$	18
	Timer case bolt	$\frac{1}{8}$	18
	Timing gear cover bolt	$\frac{1}{8}$	18
	Water jacket hand hole cover bolts	$\frac{1}{2}$	16
	Water pump inlet bolt	$\frac{1}{8}$	18
MUFFLER	Muffler to pipe bolt	$\frac{5}{8}$	20
	Muffler bracket to frame bolt and nut	$\frac{3}{8}$	18
RADIATOR	Radiator to frame stud nut	$1\frac{3}{8}$	44X
	Radiator apron to frame bolt and nut	$\frac{1}{8}$	14
	Hood cover to radiator bolt and nut	$\frac{7}{2}$	16
REAR AXLE	Rear axle housing bolt (front)	$\frac{5}{8}$	20
	Rear axle housing bolt (rear)	$\frac{5}{8}$	20
	Rear axle drain plug	$1\frac{1}{8}$	34
	Rear axle drive pinion nut	$1\frac{1}{8}$	36X
	Universal housing nut (rear)	$\frac{1}{2}$	103
	Torque rod bolt nut (rear)	$\frac{3}{8}$	24
	Torque rod clamp bolt and nut (rear)	$\frac{5}{8}$	20
	Torque rod spring stud bolt (front)	1	32
	Torque rod spring stud nut (front)	$1\frac{1}{8}$	30
RUNNING BOARD	Running board to apron bolt and nut	$\frac{1}{2}$	16
	Running board to support bolt nut	$\frac{1}{8}$	18
SPRINGS	Front spring clamp bolt and nut	$\frac{1}{2}$	16
	Front spring clip nuts	$\frac{1}{8}$	4230
	Front spring shackle bolt nut (front end)	$1\frac{1}{8}$	36
	Rear spring bumper bolt	$\frac{3}{4}$	24
	Rear spring clamp bolt and nut	$\frac{1}{2}$	16
	Rear spring clip nut	$\frac{1}{8}$	30
	Rear spring perch to housing bolt	$\frac{1}{8}$	18
	Rear spring shackle bolt nut	$1\frac{1}{8}$	36
STARTER	Starter housing to case cap screw	$\frac{3}{8}$	18
STEERING GEAR	Steering gear bracket to frame bolt and nut	$\frac{3}{8}$	18
	Steering gear housing clamp bolt and nut	$\frac{3}{8}$	18
	Steering post bracket to cowl bolt nut	$\frac{3}{8}$	24
TRANSMISSION	Transmission bottom cover bolt	$\frac{1}{2}$	16
	Transmission case to motor cap screw	$\frac{5}{8}$	20
	Transmission control cover bolt	$\frac{1}{2}$	16
	Transmission case to air pump cap screw	$\frac{1}{8}$	18
WHEELS	Rim nuts	$\frac{5}{8}$	20

BLACKHAWK MANUFACTURING CO., MILWAUKEE

CADIL-
LAC

CHAND-
LER

CHEVRO-
LET

CHRYSL-
ER

CLEVE-
LAND

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FORD

HUDSON

HUP-
MOBILE

JEW TT

NASH

OAK-
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OLDS-
MOBILE

OVER-
LAND

PACK-
ARD

PAIGE

REO

RICKEN-
BACKER

STAR

STUDE-
BAKER

WILLYS-
KNIGHT



When you see a "HEX" think of Blackhawk

CHANDLER OWNER'S SET

With this assortment of Sockets and Handles the Chandler owner saves time and trouble—he has a tool for every bolt and nut on his car.

INTERCHANGEABLE SOCKET WRENCHES

No.	16— $\frac{1}{2}$ "	Hex. Socket.....	\$0.30
No.	18— $\frac{5}{8}$ "	Hex. Socket.....	.30
No.	20— $\frac{3}{4}$ "	Hex. Socket.....	.30
No.	22— $\frac{7}{8}$ "	Hex. Socket.....	.30
No.	24— $\frac{1}{2}$ "	Hex. Socket.....	.40
No.	28— $\frac{3}{4}$ "	Hex. Socket.....	.40
No.	30— $\frac{1}{2}$ "	Hex. Socket.....	.50
No.	T-5—	Double End Handle.....	.60
No.	T-10—	10" Extension Bar.....	.75
No.	3310—	12" T Handle.....	1.00
No.	500—	Brace	1.20

Set Complete\$6.05

Canvas Bag 50c Extra

WRENCH SPECIFICATIONS FOR WORK ON CHANDLER CARS MODEL 30-A 1924-1925

	Part Name.	Size across Plats on Nuts	Blackhawk Socket No.
BATTERY	Battery hook bolt nuts	$\frac{1}{2}$	16
BODY PARTS	Body to frame bolt nuts	$\frac{5}{8}$ sq.....	.020
BRAKES	Brake adjusting nut	$\frac{1}{2}$	22
	Brake band support stud nut	$\frac{3}{4}$	24
	Brake cross shaft bracket bolt and nut	$\frac{1}{2}$	16
	Brake cross shaft lever cap screw	$\frac{1}{2}$	16
	Hand brake adjusting nut	$\frac{3}{4}$	24
CARBURETOR	Carburetor to manifold cap screw	$\frac{5}{8}$	18
CLUTCH	Clutch housing to flywheel cap screw	$\frac{1}{2}$	16
	Clutch pedal adjusting clamp screw	$\frac{1}{2}$	16
	Clutch pedal adjusting lever bolt and nut	$\frac{1}{2}$	18
FAN	Fan bracket screw	$\frac{5}{8}$	20
	Fan stud nut	$\frac{5}{8}$	18
FENDERS	Front fender support to frame bolt and nut.....	$\frac{1}{2}$	16
	Rear fender to body bolts	$\frac{1}{2}$	16
FRONT AXLE	Drag link plug		T1
	Steering knuckle lever nut	$1\frac{1}{4}$	40X
	Steering knuckle nut	$1\frac{1}{4}$	40X
	Steering tie rod bolt nut	$\frac{3}{4}$	24
	Steering tie rod plug		T1
GASOLINE TANK	Gasoline tank support nut	$\frac{1}{2}$	16
GENERATOR	Generator to support cap screw	$\frac{1}{2}$	16
HEAD LAMPS	Head lamp bracket to fender bolt and nut	$\frac{1}{2}$	16
	Head lamp stud nut	$\frac{3}{4}$	24
	Head lamp tie rod bolt and nut	$\frac{1}{2}$	16

BLACKHAWK MANUFACTURING CO., MILWAUKEE

When you see a "HEX" think of Blackhawk



WRENCH SPECIFICATIONS FOR WORK ON CHANDLER CARS—Continued
MODEL 30-A 1924-1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
MOTOR	Connecting rod stud nut	$\frac{9}{16}$	18
	Cylinder to block	$\frac{3}{8}$	T24
	Cylinder head stud nut	$\frac{3}{8}$	24
	Exhaust manifold to cylinder stud nut	$\frac{1}{2}$	103
	Exhaust manifold to pipe cap screws	$\frac{1}{2}$	16
	Flywheel to crankshaft bolt and nut	$\frac{3}{8}$	24
	Heater cover cap screws	$\frac{1}{2}$	16
	Main bearing stud nut	$\frac{3}{8}$	24
	Motor support bolt and nut	$\frac{3}{8}$	24
	Oil drain flange cap screw	$\frac{1}{2}$	16
	Oil screen bracket cap screw	$\frac{1}{2}$	16
	Oil pump cap screw	$\frac{1}{2}$	16
	Oil filler stud nut	$\frac{1}{2}$	16
	Oil pan cap screws	$\frac{1}{2}$	16
	Pump support cap screw	$\frac{1}{8}$	18
	Timing gear cover cap screws	$\frac{1}{2}$	16
	Timer bracket to motor cap screws	$\frac{1}{2}$	16
	Timer unit to support cap screw	$\frac{1}{2}$	18
	Water inlet manifold cap screws	$\frac{1}{2}$	16
	Water outlet manifold cap screws	$\frac{1}{2}$	T16
MUFFLER	Muffler bracket to frame bolt and nut.....	$\frac{1}{2}$	16
RADIATOR	Radiator stud nut	$\frac{3}{8}$	102
REAR AXLE	Differential carrier cap stud nut	$\frac{1}{2}$	30
	Differential carrier housing cap screws	$\frac{1}{8}$	18
	Differential carrier housing clamp bolt	$\frac{5}{8}$	20
	Drive pinion nut	$1\frac{1}{4}$	40X
	Drive shaft nut	$1\frac{1}{4}$	40X
	Propeller shaft coupling bolt and nut	$\frac{3}{4}$	24
	Rear axle cover cap screw	$\frac{1}{8}$	18
	Rear axle drain plug	$\frac{1}{8}$ sq.	014
RUNNING BOARD	Running board to support bolt nut	$\frac{1}{8}$	18
SPRINGS	Front spring clamp bolt and nut	$\frac{1}{2}$	16
	Front spring clip bolt nut	$\frac{7}{8}$	28
	Front spring shackle bolt nut	$\frac{7}{8}$	28
	Rear spring clamp bolt and nut	$\frac{1}{2}$	16
	Rear spring shackle bolt nut (front)	$1\frac{1}{8}$	36
	Rear spring shackle bolt nut (rear)	1	32
STARTER	Starter to motor	$\frac{1}{2}$	103
STEERING GEAR	Steering gear housing clamp bolt and nut	$\frac{1}{8}$	18
	Steering gear housing clamp bracket bolt and nut	$\frac{1}{8}$	18
	Steering gear lever nut	$\frac{3}{8}$	24
	Steering post bracket cowl clamp bolt	$\frac{1}{8}$	18
TRANSMISSION	Transmission case to motor cap screw	$\frac{1}{8}$	18
	Transmission control cover cap screw	$\frac{1}{2}$	16
	Transmission drain plug	$\frac{1}{8}$ sq.	018
	Transmission drive gear spider nut	$1\frac{1}{4}$	40X
	Transmission filler plug	$\frac{1}{8}$ sq.	018
	Transmission main drive bracket (rear) c. s.	$\frac{1}{8}$	18
WHEELS	Demountable wheel nuts	$\frac{3}{4}$	24

CADIL-
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CHRYSL-
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CLEVEL-
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MOBILE

JEW TT

NASH

OAK-
LAND

OLDS-
MOBILE

OVER-
LAND

PACK-
ARD

PAIGE

REO

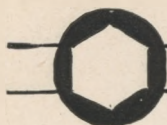
RICKEN-
BACKER

STAR

STUDE-
BAKER

WILLYS-
KNIGHT

BLACKHAWK MANUFACTURING CO., MILWAUKEE



When you see a "HEX" think of Blackhawk

CHEVROLET OWNER'S SET

With this assortment of Sockets and Handles the Chevrolet owner saves time and trouble—he has a tool for every bolt and nut on his car.

INTERCHANGEABLE SOCKET WRENCHES

No. 16— $\frac{1}{2}$ "	Hex. Socket.....	\$0.30
No. 18— $\frac{3}{8}$ "	Hex. Socket.....	.30
No. 20— $\frac{5}{8}$ "	Hex. Socket.....	.30
No. 24— $\frac{3}{4}$ "	Hex. Socket.....	.40
No. 26— $1\frac{1}{8}$ "	Hex. Socket.....	.40
No. 28— $1\frac{1}{2}$ "	Hex. Socket.....	.40
No. 016— $\frac{1}{2}$ "	Square Socket.....	.35
No. T-5—	Double End Handle.....	.60
No. 3310—12"	T Handle.....	1.00
Set Complete		\$4.05

Canvas Bag 50c Extra

WRENCH SPECIFICATIONS FOR WORK ON CHEVROLET CARS MODELS 1924-1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
BATTERY	Battery box bracket to frame bolts	$\frac{1}{2}$	16
BODY PARTS	Body to frame bolt nuts	$\frac{5}{8}$ sq.....	.020
	Brake shaft lever bolts	$\frac{1}{2}$	16
	Hand brake lever bolt	$\frac{1}{8}$	18
CARBURETOR	Carburetor to manifold screw	$\frac{1}{2}$	16
CLUTCH	Clutch band adjusting stud nut	$\frac{1}{2}$ sq.....	.103
	Clutch collar ball thrust cap screw	$\frac{1}{2}$	16
	Clutch collar trunnion screw	$\frac{3}{8}$.....	.4950
	Clutch pedal adjusting bolt	$\frac{1}{8}$	18
	Clutch pedal adjusting nut	$\frac{3}{8}$	24
	Clutch yoke bolts	$\frac{1}{8}$	18
FAN	Fan to stud screw	$\frac{1}{8}$	14
FENDERS	Fender bracket bolts	$\frac{1}{8}$	18
FRONT AXLE	Drag link plug		T1
	Steering arm ball nut	$\frac{7}{8}$	28
	Steering knuckle king bolt nut	$\frac{7}{8}$	28
	Steering knuckle	$1\frac{1}{8}$	34
	Steering rod pitman arm	$\frac{1}{8}$	30
	Steering tie rod yoke bolt	$\frac{5}{8}$	24
	Steering tie rod yoke bolt nut	$\frac{7}{8}$	28
	Steering tie rod yoke clamp bolt	$\frac{1}{8}$	18
GASOLINE TANK	Gasoline tank strap nut	$\frac{5}{8}$ sq.....	.102
GENERATOR	Generator to motor screws	$\frac{1}{2}$	16
HEAD LAMPS	Head lamp stud nut	$\frac{3}{4}$ sq.....	.024

BLACKHAWK MANUFACTURING CO., MILWAUKEE

When you see a "HEX" think of Blackhawk

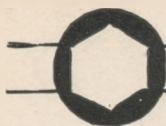


WRENCH SPECIFICATIONS FOR WORK ON CHEVROLET CARS—Continued
MODELS 1924-1925

	Part Name.	Size across	
		Flats on Nuts	Blackhawk Socket No.
MOTOR	Connecting rod (wrist pin end)	$\frac{9}{16}$	18
	Connecting rod cap screw	$\frac{9}{16}$	18
	Cylinder head bolts	$\frac{3}{4}$	24
	Flywheel to crank shaft screws	$\frac{1}{2}$	18
	Intake and exhaust manifold stud nuts	$\frac{1}{2}$	18
	Main bearing bolts	$\frac{1}{2}$	26
	Motor to motor arm bolts	$\frac{5}{8}$	20
	Motor arm to frame bolts	$\frac{5}{8}$	20
	Motor drain plug	$\frac{1}{2}$ sq.	.016
	Oil pan bolts	$\frac{1}{2}$	16
	Oil pump to motor screws	$\frac{1}{2}$	14
	Rocker arm bracket screw	$\frac{1}{2}$	16
	Water outlet screw	$\frac{5}{8}$	20
	Water pump screw	$\frac{1}{2}$	16
MUFFLER	Muffler to bracket bolt	$\frac{1}{2}$ sq.	.016
RADIATOR	Radiator stud nut	$\frac{1}{8}$ sq.	.018
REAR AXLE	Differential case screw	$\frac{1}{8}$	18
	Drive shaft housing screws	$\frac{1}{2}$	24
	Drive shaft nut	1	32
	Rear axle drain plug	$\frac{1}{2}$ sq.	.016
	Rear axle housing bolts	$\frac{1}{2}$	16
	Rear axle nut	1 $\frac{1}{16}$	.34X
RUNNING BOARD	Running board to support nut	$\frac{7}{8}$ sq.	.014
SPRINGS	Spring bolt and nut (front and rear)	$\frac{3}{4}$	28
	Spring clip nut (front)	$\frac{3}{4}$	24
	Spring U bolt nut (front and rear)	$\frac{1}{2}$	30
STARTER	Starter to bracket screws	$\frac{9}{16}$	18
	Starting switch bracket bolts	$\frac{3}{4}$	24
	Bendix drive screw	$\frac{1}{2}$	16
STEERING GEAR	Steering arm nut	1 $\frac{1}{8}$	34
	Steering column support flange bolt	$\frac{1}{2}$	18
	Steering gear clamp bolt	$\frac{1}{2}$	20
TRANSMISSION	Spline shaft nut	$\frac{1}{8}$	30
	Transmission bearing screws	$\frac{1}{2}$	16
	Transmission cover screws	$\frac{1}{2}$	16
	Transmission drain plug	$\frac{1}{2}$ sq.	.018
	Transmission filler plug	$\frac{1}{2}$ sq.	.018
	Transmission to motor arm bolt	$\frac{5}{8}$	20
	Transmission to motor arm bolt nut	$\frac{3}{4}$	24
	Universal joint housing	$\frac{1}{2}$	16
WHEELS	Demountable rim bolt nuts	$\frac{3}{4}$	24

BLACKHAWK MANUFACTURING CO., MILWAUKEE

CHANDLER
CHEVROLET
CHRYSLER
CLEVELAND
DODGE
ESSEX
FORD
HUDSON
HUP-MOBILE
JEW TT
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OAKLAND
OLDS-MOBILE
OVERLAND
PACKARD
PAIGE
REO
RICKEN-BACKER
STAR
STUDE-BAKER
WILLYS-KNIGHT



When you see a "HEX" think of Blackhawk

CHRYSLER OWNER'S SET

With this assortment of Sockets and Handles the Maxwell owner saves time and trouble—he has a tool for every bolt and nut on his car.

INTERCHANGEABLE SOCKET WRENCHES

No. 16— $\frac{1}{2}$ "	Hex. Socket.....	\$0.30
No. 18— $\frac{5}{8}$ "	Hex. Socket.....	.30
No. 19— $\frac{3}{4}$ "	Hex. Socket.....	.30
No. 20— $\frac{7}{8}$ "	Hex. Socket.....	.30
No. 24— $\frac{3}{4}$ "	Hex. Socket.....	.40
No. 28— $\frac{7}{8}$ "	Hex. Socket.....	.40
No. 30— $\frac{1}{2}$ "	Hex. Socket.....	.50
No. T-5—	Double End Handle.....	.60
No. 3310—12"	T Handle.....	1.00
No. 500—	Brace	1.20

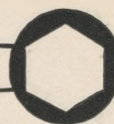
Set Complete\$5.30

Canvas Bag 50c Extra

WRENCH SPECIFICATIONS FOR WORK ON MAXWELL CARS MODEL 1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
BODY PARTS	Body to frame	$\frac{9}{16}$ sq.....	.018
BRAKE	Brake cross shaft bracket bolts	$\frac{1}{2}$	16
	Brake rod lever screws	$\frac{1}{8}$	18
	Brake dust shield bolt nuts	$\frac{3}{8}$	20
	Hand brake rack to transmission screws	$\frac{1}{8}$	18
CARBURETOR	Carburetor to manifold screw	$\frac{1}{2}$.....	.103
CLUTCH	Clutch housing to motor screws	$\frac{1}{8}$	18
	Clutch lever clamp bolt	$\frac{1}{8}$	18
	Clutch to flywheel screws	$\frac{1}{2}$	16
FAN	Fan stud nut	$\frac{3}{4}$	20
FENDERS	Front fender to bracket bolts	$\frac{1}{2}$	16
	Rear fender to body screws	$\frac{1}{2}$	16
FRONT AXLE	Steering knuckle nut	1 $\frac{1}{8}$	36
	Steering knuckle pivot screw	$\frac{3}{8}$	18
	Steering knuckle arm nut	$\frac{1}{2}$	30
	Steering knuckle arm ball nut	$\frac{3}{4}$	24
	Drag link plug		T1
	Tie rod plugs		T1
GAS TANK	Gas tank support strap bolts	$\frac{1}{2}$	16
GENERATOR	Generator to motor screw	$\frac{1}{2}$	30
	Generator strap nut	$\frac{1}{2}$	16
HEAD LAMPS	Head lamp stud nut	$\frac{3}{4}$	28
	Head lamp bracket to fender bolts	$\frac{9}{16}$ sq.....	.018

BLACKHAWK MANUFACTURING CO., MILWAUKEE



WRENCH SPECIFICATIONS FOR WORK ON MAXWELL CARS—Continued
MODEL 1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
MOTOR	Connecting rod stud nut.....	$\frac{1}{16}$	18
	Connecting rod stud nut (wrist pin end).....	$\frac{1}{16}$	18
	Cylinder head stud nuts.....	$\frac{5}{16}$	20
	Exhaust manifold to motor bolt.....	$\frac{1}{2}$	18
	Flywheel to shaft bolts.....	$\frac{3}{8}$	20
	Intake manifold to motor stud nut.....	$\frac{1}{2}$	16
	Intake manifold to heater stud nut.....	$\frac{1}{2}$	19
	Main bearing (rear) screws.....	$\frac{3}{16}$	24
	Main bearing (center) screws.....	$\frac{7}{8}$	28
	Main bearing flange screw (front and rear).....	$\frac{1}{2}$	18
	Motor support bolt (rear).....	$\frac{1}{8}$	30
	Motor front support spring clip bolt.....	$\frac{1}{4}$	18
	Motor front support spring bracket to frame bolt...	$\frac{1}{4}$	16
	Motor drain plug.....	$1\frac{1}{8}$	36
	Oil filler screw.....	$\frac{1}{2}$	16
	Oil gauge screw.....	$\frac{1}{2}$	16
	Oil pan screws.....	$\frac{1}{2}$	16
	Oil pump screws.....	$\frac{1}{2}$	16
	Timing gear cover screws.....	$\frac{1}{8}$	18
	Timer bracket screw.....	$\frac{1}{2}$	16
	Timer to motor screw.....	$\frac{1}{2}$	16
	Water inlet to cylinder screws.....	$\frac{1}{2}$	16
MUFFLER	Muffler support bolt.....	$\frac{1}{2}$	16
	Muffler to pipe bolt.....	$\frac{1}{2}$	16
	Muffler tail pipe support bolt.....	$\frac{1}{2}$	16
REAR AXLE	Rear axle housing cover screws.....	$\frac{9}{16}$	18
	Rear axle drive shaft nut.....	$1\frac{1}{4}$	40X
	Rear axle drain plug.....	$\frac{1}{8}$ sq.	.018
	Rear axle drive pinion to spider nut.....	$\frac{1}{8}$	30
	Differential carrier stud nut.....	$\frac{1}{16}$	18
	Differential carrier clamp bolt.....	$\frac{9}{16}$	18
RUNNING BOARD	Running board to support nuts.....	$\frac{9}{16}$ sq.	.018
SPRINGS	Front spring shackle bolt nut.....	$\frac{1}{8}$	30
	Front spring clip nut.....	$\frac{5}{8}$	20
	Rear spring shackle bolts.....	$1\frac{1}{16}$	34
	Rear spring clip nut.....	$\frac{5}{8}$	20
	Spring clamp bolts.....	$\frac{1}{2}$	16
STARTER	Starter to motor screw.....	$\frac{9}{16}$	103
STEERING GEAR	Steering gear assembly.....	$\frac{1}{2}$	16
	Steering gear support bracket clamp bolt.....	$\frac{3}{4}$	24
	Steering gear support bracket to frame bolt.....	$\frac{1}{8}$	18
	Steering gear worm gear adjusting screws.....	$\frac{1}{2}$	16
TRANSMISSION	Transmission to support screws.....	$\frac{3}{4}$	24
	Transmission drain plug.....	$\frac{3}{4}$ sq.	.024
	Transmission filler plug.....	$\frac{3}{4}$ sq.	.024
	Transmission rear bearing screws.....	$\frac{1}{8}$	18
	Transmission spline shaft to spider nut.....	$1\frac{1}{16}$	34
	Transmission cover screws.....	$\frac{1}{8}$	18
	Drive shaft coupling bolts.....	$\frac{5}{8}$	20
WHEELS	Disc wheel hub nuts.....	$\frac{3}{4}$	24
	Rim nut	$\frac{3}{4}$	24

CHEVRO-
LET

CHRYSLER

CLEVELAND

DODGE

ESSEX

FORD

HUDSON

HUP-
MOBILE

JEV TT

NASH

OAK-
LAND

OLDS-
MOBILE

OVER-
LAND

PACK-
ARD

PAIGE

REO

RICKEN-
BACKER

STAR

STUDE-
BAKER

WILLYS-
KNIGHT

BLACKHAWK MANUFACTURING CO., MILWAUKEE



When you see a "HEX" think of Blackhawk

CLEVELAND OWNER'S SET

With this assortment of Sockets and Handles the Cleveland owner saves time and trouble—he has a tool for every bolt and nut on his car.

INTERCHANGEABLE SOCKET WRENCHES

No.	16— $\frac{1}{2}$ "	Hex. Socket.....	\$0.30
No.	18— $\frac{5}{8}$ "	Hex. Socket.....	.30
No.	20— $\frac{3}{4}$ "	Hex. Socket.....	.30
No.	22— $\frac{7}{8}$ "	Hex. Socket.....	.30
No.	24— $\frac{1}{2}$ "	Hex. Socket.....	.40
No.	28— $\frac{7}{8}$ "	Hex. Socket.....	.40
No.	30— $\frac{1}{2}$ "	Hex. Socket.....	.50
No.	016— $\frac{1}{4}$ "	Sq. Socket.....	.35
No.	022— $\frac{1}{2}$ "	Sq. Socket.....	.40
No.	T-5—	Double End Handle.....	.60
No.	T-10—10"	Extension Bar.....	.75
No.	3310—12"	T Handle.....	1.00
Set Complete			\$5.60

Canvas Bag 50c Extra

WRENCH SPECIFICATIONS FOR WORK ON CLEVELAND CARS MODEL 43 1924-1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
BODY PARTS	Body to frame	$\frac{1}{2}$	22
BRAKES	Brake band support stud nut	$\frac{3}{4}$	24
	Brake band adjusting nut	$\frac{3}{4}$	24
	Brake cross-shaft brackets bolt and nut	$\frac{1}{2}$	16
	Brake cross-shaft levers bolt and nut	$\frac{1}{2}$	16
	Front brake frame lever stud nut	$\frac{1}{2}$	30
CARBURETOR	Carburetor to manifold cap screws	$\frac{1}{2}$	103
CLUTCH	Clutch pedal adjusting stud nut	$\frac{1}{2}$	18
	Clutch pan cap screws	$\frac{1}{2}$	16
	Clutch to flywheel cap screw	$\frac{1}{2}$	16
	Clutch adjusting nut	$\frac{5}{8}$	20
FAN	Fan bracket cap screw	$\frac{5}{8}$	20
FENDERS	Front fender support bolt and nut	$\frac{1}{2}$	16
	Rear fender to body bolts	$\frac{1}{2}$	16
FRONT AXLE	Drag link plug		T1
	Steering knuckle lever nut	$1\frac{1}{4}$	40X
	Steering tie rod ball nut	$\frac{3}{4}$	24
	Steering knuckle nut	$1\frac{1}{4}$	40X
GAS TANK	Gas tank support strap nut	$\frac{1}{2}$	103
GENERATOR	Generator to bracket cap screw	$\frac{1}{2}$	16
	Generator bracket to motor cap screws	$\frac{1}{2}$	18
HEAD LAMP	Head lamp stud nut	$\frac{7}{8}$	28
	Head lamp tie rod bolt and nut	$\frac{1}{2}$	18
MISCELLANEOUS	Oiling pressure tank cap screws	$\frac{1}{2}$	18
	Oiling pressure tank drain plug	$\frac{7}{8}$	28

BLACKHAWK MANUFACTURING CO., MILWAUKEE



WRENCH SPECIFICATIONS FOR WORK ON CLEVELAND CARS—Continued
MODEL 43 1924-1925

Part Name.	Nuts Plats on Size across	Socket No. Blackhawk
MOTOR		
Cylinder head stud nut	$\frac{3}{4}$	24
Cylinder to block stud nut	$\frac{3}{4}$	24
Connecting rod stud nut	$\frac{1}{2}$	18
Engine shield	$\frac{1}{2}$ sq.....	016
Flywheel to crank stud nut	$\frac{3}{4}$	24
Flywheel housing to case cap screws	$\frac{5}{8}$	20
Heater to exhaust pipe cap screws	$\frac{1}{2}$	16
Intake and exhaust manifold stud nut	$\frac{1}{2}$	18
Main bearing stud nut	$\frac{3}{4}$	24
Motor support bolt and nut (front)	$\frac{3}{4}$	24
Motor support bolt and nut (rear)	$\frac{1}{2}$	30
Oil filler to block cap screws	$\frac{1}{2}$	16
Oil drain flange cap screw	$\frac{1}{2}$	16
Oil pan cap screws	$\frac{1}{2}$	16
Timing gear cover cap screws	$\frac{1}{2}$	16
Valve cover stud nut	$\frac{1}{2}$	16
Water pump to block cap screws	$\frac{1}{2}$	103
Water outlet manifold cap screws	$\frac{1}{2}$	16
MUFFLER		
Muffler bracket to frame bolt and nut	$\frac{1}{2}$	16
RADIATOR		
Radiator stud to frame nut	$\frac{3}{4}$	24
Radiator stud support cap screw	$\frac{1}{2}$	16
REAR AXLE		
Rear axle cover cap screw	$\frac{1}{2}$	18
Rear axle drain plug	$\frac{1}{2}$ sq.....	022
Rear axle filler plugs	$\frac{1}{2}$ sq.....	018
Differential carrier housing cap screw	$\frac{1}{2}$	18
Differential carrier housing clamp bolt	$\frac{5}{8}$	20
Differential carrier cap stud nut	$\frac{1}{2}$	30
Drive pinion to spider nut	$1\frac{1}{4}$	40X
Drive pinion bearing adjusting nut cap screw	$\frac{1}{2}$	16
Drive shaft nut	$1\frac{1}{4}$	40X
Propeller shaft coupling stud nut (front half)	$\frac{3}{4}$	20
Propeller shaft coupling stud nut (rear half)	$\frac{3}{4}$	24
RUNNING BOARD		
Running board to supports bolt nuts	$\frac{1}{2}$	18
Running board toe board bolt nut	$\frac{1}{2}$	16
SPRING		
Front spring shackle bolt nut	$\frac{1}{2}$	30
Front spring clip nut	$\frac{5}{8}$	28
Front spring clamp bolt and nut	$\frac{1}{2}$	16
Rear spring shackle bolt nut	$\frac{1}{2}$	30
Rear spring clip nut	$\frac{5}{8}$	28
Rear spring clamp bolt and nut	$\frac{1}{2}$	16
STARTER		
Starter to motor cap screws	$\frac{1}{2}$	T18
STEERING GEAR		
Steering gear housing clamp bolt nut	$\frac{1}{2}$	18
Steering post clamp bolt and nut	$\frac{1}{2}$	18
Steering post clamp to cowl nut	$\frac{5}{8}$	20
TRANSMISSION		
Transmission case to motor cap screws	$\frac{5}{8}$	20
Transmission drain plug	$\frac{1}{2}$ sq.....	022
Transmission filler plug	$\frac{1}{2}$ sq.....	022
Transmission main drive shaft to spider nut	$1\frac{1}{4}$	40X
Transmission main bearing cover cap screws	$\frac{1}{2}$	16
Transmission control cover cap screws	$\frac{1}{2}$	16
Transmission brake drum to spider	$\frac{5}{8}$	20
Transmission coupling to propeller shaft spider	$\frac{3}{4}$	24
WHEELS		
Rim nuts	$\frac{3}{4}$	24

CHRYSLER

CLEVELAND

DODGE

ESSEX

FORD

HUDSON

HUPMOBILE

JEW TT

NASH

OAKLAND

OLDSMOBILE

OVERLAND

PACKARD

PAIGE

REO

RICKENBACKER

STAR

STUDEBAKER

WILLYSKNIGHT

BLACKHAWK MANUFACTURING CO., MILWAUKEE



When you see a "HEX" think of Blackhawk

DODGE OWNER'S SET

With this assortment of Sockets and Handles the Dodge owner saves time and trouble—he has a tool for every bolt and nut on his car.

INTERCHANGEABLE SOCKET WRENCHES

No. 14— $\frac{7}{8}$ "	Hex. Socket.....	\$0.30
No. 16— $\frac{1}{2}$ "	Hex. Socket.....	.30
No. 18— $\frac{9}{8}$ "	Hex. Socket.....	.30
No. 20— $\frac{5}{8}$ "	Hex. Socket.....	.30
No. 22— $\frac{11}{8}$ "	Hex. Socket.....	.30
No. 24— $\frac{3}{4}$ "	Hex. Socket.....	.40
No. 28— $\frac{7}{8}$ "	Hex. Socket.....	.40
No. T-4	Offset and T.....	.60
No. T-10	10" Extension Bar.....	.75
No. 210	6" T. Handle.....	.75
No. 500	Brace	1.20

Set Complete\$5.70

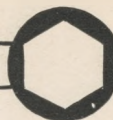
Canvas Bag 50c Extra

WRENCH SPECIFICATIONS FOR WORK ON DODGE CARS ALL MODELS 1924-1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
BATTERY	Battery box bracket to frame bolt and nut	$\frac{9}{16}$	18
	Battery box to bracket bolt and nut	$\frac{1}{2}$	16
BODY PARTS	Body to frame nuts	$\frac{3}{4}$	24
	Dash to body	$\frac{1}{8}$	14
BRAKES	Brake band to support bracket nut	$\frac{1}{2}$	T16
	Brake tie rod adjusting nut	$\frac{1}{2}$	103
CARBURETOR	Carburetor to manifold cap screws	$\frac{1}{2}$	16
CLUTCH	Clutch pedal clamp bolt	$\frac{1}{2}$	16
FAN	Fan adjusting screw	$\frac{5}{8}$	20
FENDERS	Front fender to frame bolt and nut	$\frac{9}{16}$	18
	Front fender bracket to frame bolt and nut	$\frac{1}{2}$	16
	Rear fender to body nuts	$\frac{1}{2}$	16
FRONT AXLE	Drag link plug		T1
	Steering knuckle arm ball nut	$\frac{3}{4}$	24
	Steering knuckle arm nut	1	32
	Steering knuckle king bolt and nut	$\frac{1}{8}$	30
	Steering knuckle nut	$\frac{1}{16}$	34
	Steering tie rod yoke clamp bolt	$\frac{1}{8}$	18
GASOLINE TANK	Gasoline tank support strap nut	$\frac{9}{16}$	103
HEAD LAMPS	Head lamp bracket to fender bolt	$\frac{7}{8}$	14
	Head lamp tie rod nut	$\frac{1}{8}$	18

BLACKHAWK MANUFACTURING CO., MILWAUKEE

When you see a "HEX" think of Blackhawk



WRENCH SPECIFICATIONS FOR WORK ON DODGE CARS—Continued
ALL MODELS 1924-1925

Part Name.		Size across Flats on Nuts	Blackhawk Socket No.	
MOTOR	Breather screws	1/2	16	
	Connecting rod bolt nut	3/4	24	
	Cylinder head stud nut	1 1/8	22	CLEVELAND
	Cylinder water inlet stud nut	1 1/8	18	
	Cam shaft gear cap screws	1/2	16	
	Engine shield bolt and nut	1 1/8	14	
	Engine support bolt (front)	1 1/8	18	
	Engine support bolt and nut (rear)	1 1/8	28	DODGE
	Exhaust manifold	1 1/8	18	
	Flywheel to crankshaft bolt and nut	1 1/8	24	
	Main bearing stud nut	3/4	28	
	Oil pan screws	1/2	16	
	Oil pan strainer and pipe screw	1/2	16	ESSEX
	Oil pump screws	1/2	16	
	Push rod guide crab stud nut	1 1/8	18	
	Timing gear cover screws	1/2	16	
	Timer coupling bolts	1 1/8	14	
	Water pump gear cover screws	1 1/8	16	FORD
	Water pump gear housing screws	1 1/8	16	
	Water pump to motor screws	1 1/8	18	
MUFFLER	Muffler bracket bolts and nuts	1/2 sq.	016	HUDSON
RADIATOR	Radiator stud nut	3/4	24	
REAR AXLE	Axle drive shaft nut	1 1/4	40X	HUP-MOBILE
	Differential carrier cap stud nut	3/4	28	
	Differential carrier clamp bolt	1 1/8	28	
	Differential carrier clamp bolt nut	1 1/8	32	
	Differential carrier housing bolt	5/8	20	
	Differential case screws	1 1/8	18	JEW TT
	Differential case to ring gear screw	1 1/8	18	
	Propeller shaft bearing retainer screw	1 1/8	18	
	Propeller shaft drive pinion nut	1 1/4	40X	
	Rear axle drain plug	1 1/8 sq.	014	
	Rear axle housing cover screws	1 1/8	14	NASH
RUNNING BOARD	Running board to support nut	1 1/8 sq.	018	
SPRINGS	Front spring bolt nuts	1 1/8	30	OAKLAND
	Front spring clamp bolt and nut	5/8	20	
	Front spring clip nuts	3/4	24	
	Rear spring bolt nut (front)	1 1/8	32	
	Rear spring bolt nut (rear)	1 1/8	30	OLDS-MOBILE
	Rear spring clamp bolt and nut	5/8	20	
	Rear spring clip nut	3/4	28	
STARTER-GENERATOR	Starter generator adjusting bracket screws	1/2	16	
	Starter generator clamp strap adjusting nut	1 1/8	103	
	Starter generator adjusting screw nut	1 1/8	103	OVERLAND
	Starter generator clamp strap to motor screw	1/2	16	
	Starter generator chain inspection cover screw	1/2	16	
STEERING GEAR	Steering gear case	1/2	16	PACKARD
	Steering gear case clamp bolt	5/8	20	
	Steering gear case bracket clamp bolt	1 1/8	22	
	Steering gear shaft connection bolts	1 1/8	18	
	Steering lever arm clamp bolt	3/4	24	
	Steering post bracket bolt	1/2	16	PAIGE
TRANSMISSION	Transmission case to block bolts	1/2	16	
	Transmission case cover screws	1/2	16	
	Transmission case drain plug	1/2 sq.	016	
	Transmission main shaft nut	1 1/4	40X	REO
	Reverse idler pinion bracket screws	1/2	16	
	Universal joint housing bolts	1/2	16	
	Universal housing to transmission case	1/2	16	
WHEELS	Demountable disc wheel nuts	3/4	24	RICKEN-BACKER
	Wheel hub nuts	3/4	24	

BLACKHAWK MANUFACTURING CO., MILWAUKEE

STAR

STUDE-BAKER

WILLYS-KNIGHT



When you see a "HEX" think of Blackhawk

ESSEX OWNER'S SET

With this assortment of Sockets and Handles the Essex owner saves time and trouble—he has a tool for every bolt and nut on his car.

INTERCHANGEABLE SOCKET WRENCHES

No. 14— $\frac{7}{16}$ "	Hex. Socket.....	\$0.30
No. 16— $\frac{1}{2}$ "	Hex. Socket.....	.30
No. 18— $\frac{9}{16}$ "	Hex. Socket.....	.30
No. 20— $\frac{5}{8}$ "	Hex. Socket.....	.30
No. 24— $\frac{3}{4}$ "	Hex. Socket.....	.40
No. 30— $\frac{11}{16}$ "	Hex. Socket.....	.50
No. 014— $\frac{7}{16}$ "	Sq. Socket.....	.30
No. T-4—	Offset and T.....	.60
No. T-5—	Double End Handle.....	.60
No. T-10—10"	Extension Bar.....	.75
No. 500—	Brace	1.20
Set Complete		\$5.55

Canvas Bag 50c Extra

WRENCH SPECIFICATIONS FOR WORK ON ESSEX CARS MODELS 1924-1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
BODY PARTS	Body to frame bolts	$\frac{3}{4}$	24
BRAKES	Brake band adjusting stud nut	$\frac{1}{2}$	16
	Brake band support bracket screw	$\frac{7}{16}$	18
	Brake cross shaft bracket bolts	$\frac{1}{2}$	16
	Brake cross shaft support bolts	$\frac{1}{2}$	16
CARBURETOR	Carburetor to manifold screws	$\frac{7}{16}$	104
CLUTCH	Clutch housing to flywheel	$\frac{1}{2}$	16
FAN	Fan stud nut	$\frac{1}{2}$	30
	Fan to stud screws	$\frac{1}{2}$	16
	Fan stud bracket clamp bolt	$\frac{5}{8}$	20
FENDERS	Front fender to frame bolts	$\frac{1}{2}$	16
	Rear fender to body screws	$\frac{1}{2}$	16
FRONT AXLE	Steering knuckle spindle nut	$\frac{1}{2}$	30
	Steering knuckle spindle arm nut	$\frac{1}{2}$	30
	Steering knuckle spindle arm bolt nut	$\frac{3}{4}$	24
	Steering tie rod yoke clamp bolt	$\frac{5}{8}$	20
	Steering tie rod clevis bolt	$\frac{5}{8}$	20
	Steering tie rod clevis bolt nut	$\frac{3}{4}$	24
GASOLINE TANK	Gasoline tank support strap bolt nut	$\frac{1}{2}$	103
GENERATOR	Generator bracket to motor	$\frac{1}{2}$	16
HEAD LAMPS	Head lamp bracket to fenders	$\frac{1}{2}$	16
	Head lamp stud nut	$\frac{7}{8}$	18
	Head lamp tie rod bolt	$\frac{1}{2}$	16

BLACKHAWK MANUFACTURING CO., MILWAUKEE

When you see a "HEX" think of Blackhawk



WRENCH SPECIFICATIONS FOR WORK ON ESSEX CARS—Continued
MODELS 1924-1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
MOTOR	Connecting rod stud nuts	$\frac{9}{16}$	18
	Cylinder head stud nuts	$\frac{11}{16}$	18
	Exhaust manifold stud nuts	$\frac{11}{16}$	16
	Flywheel balance bolts	$\frac{9}{16}$	18
	Flywheel to crank shaft bolts	$\frac{9}{16}$	18
	Flywheel guard screws	$\frac{11}{16}$	16
	Intake manifold to motor screws	$\frac{7}{16}$	14
	Main bearing stud nut	$\frac{11}{16}$	24
	Motor support to frame	$\frac{9}{16}$	24
	Motor support to motor (front)	$\frac{9}{16}$	18
	Motor drain plug	$\frac{11}{16}$ sq.	014
	Oil pan screws	$\frac{7}{16}$	16
	Timing gear cover bolts	$\frac{7}{16}$	16
	Timer case to motor screws	$\frac{7}{16}$	16
	Valve cover stud nut	$\frac{11}{16}$	14
	Water inlet to motor screws	$\frac{7}{16}$	16
	Water outlet to motor screws	$\frac{7}{16}$	16
MUFFLER	Muffler support bolts	$\frac{1}{2}$	16
RADIATOR	Radiator stud nuts	$\frac{5}{8}$	30
REAR AXLE	Differential carrier screws	$\frac{9}{16}$	18
	Rear axle filler plug	$\frac{11}{16}$ sq.	014
	Rear axle housing cover screws	$\frac{9}{16}$	18
	Rear axle shaft nut	$\frac{11}{16}$	30
	Rear axle to propeller shaft housing	$\frac{9}{16}$	18
RUNNING BOARD	Running board to support nut	$\frac{1}{2}$	16
SPRINGS	Front spring clip nut	$\frac{3}{4}$	102
	Front spring shackle bolt nut	$\frac{11}{16}$	30
	Rear spring clamp bolt and nut	$\frac{11}{16}$	16
	Rear spring clip nut	$\frac{3}{4}$	24
	Rear spring shackle bolt nut	$\frac{11}{16}$	30
STARTER	Starter to motor screws	$\frac{9}{16}$	18
STEERING GEAR	Steering arm lever nut	$\frac{11}{16}$	30
	Steering case cover screws	$\frac{1}{2}$	16
	Steering gear case support screws	$\frac{9}{16}$	18
	Steering gear case support to frame bolts	$\frac{5}{8}$	20
	Steering post bracket clamp bolt	$\frac{1}{2}$	16
	Steering post bracket to cowl	$\frac{9}{16}$	18
TRANSMISSION	Pedal bracket to transmission case screws	$\frac{9}{16}$	18
	Transmission cover screws	$\frac{1}{2}$	16
	Transmission to motor screws	$\frac{3}{4}$	24
	Transmission rear bearing cover screws	$\frac{1}{2}$	16
	Universal housing bolts	$\frac{11}{16}$	14
WHEELS	Demountable rim nuts	$\frac{3}{4}$	24

DODGE

ESSEX

FORD

HUDSON

HUP-
MOBILE

JEV TT

NASH

OAK-
LAND

OLDS-
MOBILE

OVER-
LAND

PACK-
ARD

PAIGE

REO

RICKEN-
BACKER

STAR

STUDE-
BAKER

WILLYS-
KNIGHT

BLACKHAWK MANUFACTURING CO., MILWAUKEE



When you see a "HEX" think of Blackhawk

FORD OWNER'S SET

With this assortment of Sockets and Handles the Ford owner saves time and trouble—he has a tool for every bolt and nut on his car.

QUICK DETACHABLE SOCKET WRENCHES

No. 16— $\frac{1}{2}$ "	Hex. Socket.....	\$0.30
No. 18— $\frac{5}{8}$ "	Hex. Socket.....	.30
No. 20— $\frac{3}{4}$ "	Hex. Socket.....	.30
No. 22— $\frac{1}{2}$ "	Hex. Socket.....	.30
No. 24— $\frac{3}{4}$ "	Hex. Socket.....	.40
No. 30— $\frac{1}{2}$ "	Hex. Socket.....	.50
No. T-4—	Offset and Tee.....	.60
No. T-10—	10" Extension Bar.....	.75
No. 500—	Brace	1.20
Set Complete		\$4.65
Canvas Bag 50c Extra		

WRENCH SPECIFICATIONS FOR WORK ON FORD CARS

Part Name	Size across	
	Flats on Nuts	Blackhawk Socket No.
BATTERY	Battery bracket bolt and nut.....	$\frac{9}{16}$ 18
	Battery clamp bolt nut.....	$\frac{1}{8}$ 22
BODY PARTS	Body bracket bolt.....	$\frac{5}{8}$ 20
	Body bracket bolt nut.....	$\frac{1}{2}$ 22
	Dash bracket to dash bolt nut.....	$\frac{1}{2}$ 16
	Dash to body bracket bolt nut.....	$\frac{9}{16}$ 18
CARBURETOR	Carburetor flange bolt and nut.....	$\frac{9}{16}$ 18
COMMUTATOR	Commutator case support bolt.....	$\frac{1}{2}$ 22
	Commutator lock nut	$\frac{3}{4}$ 24
ENGINE	Camshaft bearing set screw.....	$\frac{9}{16}$ 18
	Camshaft lock nut.....	Oval..... 433
	Connecting rod bolt nut.....	$\frac{5}{8}$ T20
	Crank case bolt and nut.....	$\frac{1}{2}$ 18
	Crank case arm bolt and nut.....	$\frac{1}{2}$ 18
	Crank case front bearing cap screw.....	$\frac{1}{2}$ 20
	Crank case lower cover screw.....	$\frac{1}{2}$ 16
	Crank case oil drain plug.....	$\frac{1}{2}$ 30
	Crankshaft main bearing bolt.....	$\frac{1}{2}$ sq..... 018
	Crankshaft bearing nut	$\frac{3}{4}$ 24
	Cylinder front cover bolt and nut.....	$\frac{9}{16}$ 18
	Cylinder front cover cap screw.....	$\frac{9}{16}$ 18
	Cylinder front cover cap screw (starter type).....	$\frac{5}{8}$ 20
	Cylinder head cap screws.....	$\frac{5}{8}$ 20
	Cylinder valve cover stud nut.....	$\frac{9}{16}$ 18
	Cylinder water inlet and outlet cap screw.....	$\frac{5}{8}$ 20
	Flywheel cap screw	$\frac{1}{2}$ 22
	Inlet and exhaust clamp stud nut.....	$\frac{9}{16}$ 18
	Piston pin clamp screw.....	$\frac{1}{8}$..... .4219X
	Valve grinder .....	.....T11
FENDERS	Fender eye bolt nuts.....	$\frac{1}{2}$ 22
	Front fender apron to frame bolt nut.....	$\frac{1}{2}$ sq..... 016
	Front fender iron bolt and nuts.....	$\frac{9}{16}$ 18
	Rear fender iron bolt nut.....	$\frac{1}{2}$ 16

BLACKHAWK MANUFACTURING CO., MILWAUKEE



WRENCH SPECIFICATIONS FOR WORK ON FORD CARS—Continued.

Part Name	Size across Flats on Nuts	Blackhawk Socket No.
FRONT AXLE		
Adjusting cone (right and left).....	Oval	451
Ball socket bolt and nut.....	$\frac{9}{16}$	18
Radius rod ball cap stud nut.....	$\frac{1}{8}$	18
Spindle arm nut	$\frac{7}{8}$	28
Spindle bolt nut	$\frac{3}{4}$	24
Spindle bolt with oiler	$\frac{1}{8}$	22
Spindle connecting rod bolt nut.....	$\frac{1}{8}$	22
Spindle connecting rod bolt nut with oiler.....	$\frac{1}{8}$	22
Spindle nut (right and left).....	$1\frac{1}{8}$	451
HEAD LAMPS		
Head lamp post nut.....	$1\frac{1}{8}$	22
MAGNETO		
Magneto contact screw	1	101
Magneto cap screw.....	$\frac{9}{16}$	18
MISCELLANEOUS		
Coll box bracket to cylinder head cap screw.....	$\frac{5}{8}$	20
Horn bracket to cylinder water inlet cap screw....	$\frac{5}{8}$	20
Spark plug, Champion X.....	$\frac{1}{8}$	130
Tire holder bracket bolt nut.....	$\frac{7}{8}$	28
MUFFLER		
Muffler head retainer bolt and nut.....	$\frac{1}{2}$	16
RADIATOR		
Radiator rod nut.....	$\frac{9}{16}$	103
Radiator stud nut.....	$\frac{1}{8}$	18
REAR AXLE		
Axle housing bolt and nut.....	$\frac{1}{2}$	16
Differential case stud nut.....	$\frac{1}{8}$	18
Differential drive gear screw.....	$\frac{1}{2}$	16
Drive shaft castle nut.....	$\frac{1}{8}$	30
Drive shaft roller bearing cap screw.....	$\frac{5}{8}$	20
Drive shaft roller bearing stud nut.....	$\frac{5}{8}$	20
Drive shaft roller bearing set screw.....	$\frac{5}{8}$	20
Rear axle shaft castle nut.....	$\frac{1}{8}$	30
Rear radius rod bolt and nut	$\frac{3}{4}$	24
Rear axle housing drain plug.....	$1\frac{1}{8}$	30
RUNNING BOARD AND SHIELDS		
Running board to front fender bolt nut.....	$\frac{9}{16}$ sq.....	103
Running board to rear fender bolt nut.....	$\frac{1}{8}$ sq.....	103
SPRINGS		
Front and rear spring hanger nuts.....	$1\frac{1}{8}$	22
Front spring clip nut.....	$\frac{7}{8}$	28
Front spring perch nut.....	$\frac{1}{8}$	30
Rear spring clip nut.....	$\frac{7}{8}$	28
Rear spring perch nut.....	1	32
STEERING GEAR		
Steering connecting rod ball socket bolt and nut...	$\frac{9}{16}$	18
Steering gear post castle nut.....	$\frac{3}{4}$	24
Steering post bracket bolt and nut.....	$\frac{9}{16}$	18
Steering tube flange screw nut.....	$\frac{1}{2}$	16
TRANSMISSION		
Brake and reverse support bolt nut.....	$\frac{9}{16}$	18
Clutch lever screw and nut.....	$\frac{1}{8}$	18
Clutch pedal support bolt.....	$\frac{1}{8}$	18
Clutch release fork clamp screw.....	$\frac{7}{8}$	18
Controller shaft bracket bolt and nut.....	$\frac{1}{2}$	16
Transmission band adjusting nut.....	$1\frac{1}{8}$	4222X
Transmission band adjusting screw nut.....	$\frac{1}{8}$	30
Transmission cover bolt and nut.....	$\frac{9}{16}$	18
Universal ball cap bolt and nut.....	$\frac{1}{8}$	18
WHEEL		
Rim bolt nuts.....	$\frac{5}{8}$	20
Rear hub lock nut.....	$\frac{1}{8}$	30
Wheel hub cap (front and rear).....	$1\frac{1}{8}$ oct.....	5504
Wheel hub flange bolt nut.....	$\frac{1}{8}$	22

BLACKHAWK MANUFACTURING CO., MILWAUKEE

ESSEX

FORD

HUDSON

HUP-MOBILE

JEW TT

NASH

OAK-LAND

OLDS-MOBILE

OVER-LAND

PACK-ARD

PAIGE

REO

RICKEN-BACKER

STAR

STUDE-BAKER

WILLYS-KNIGHT



When you see a "HEX" think of Blackhawk

HUDSON OWNER'S SET

With this assortment of Sockets and Handles the Hudson owner saves time and trouble—he has a tool for every bolt and nut on his car.

INTERCHANGEABLE SOCKET WRENCHES

No. 14— $\frac{7}{8}$ "	Hex. Socket.....	\$0.30
No. 16— $\frac{1}{2}$ "	Hex. Socket.....	.30
No. 18— $\frac{5}{8}$ "	Hex. Socket.....	.30
No. 20— $\frac{3}{4}$ "	Hex. Socket.....	.30
No. 24— $\frac{3}{4}$ "	Hex. Socket.....	.40
No. 26— $\frac{1}{2}$ "	Hex. Socket.....	.40
No. 28— $\frac{7}{8}$ "	Hex. Socket.....	.40
No. T-5—	Double End Handle.....	.60
No. T-10—	10" Extension Bar.....	.75
No. 3310—	12" T Handle.....	1.00
No. 500—	Brace	1.20
Set Complete		\$5.95

Canvas Bag 50c Extra

WRENCH SPECIFICATIONS FOR WORK ON HUDSON CARS MODEL 1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
BODY PARTS	Body to frame	$\frac{3}{4}$ "	24
BATTERY	Battery box clamp bolt	$\frac{9}{16}$ " sq.	.018
BRAKE	Brake band support screw	$\frac{9}{16}$ "	18
	Brake cross shaft bracket screws	$\frac{9}{16}$ "	18
	Brake rod adjusting nut	$\frac{9}{16}$ "	103
	Hand brake stud nut	$\frac{3}{4}$ "	24
	Hand brake bracket trans screw	$\frac{9}{16}$ "	20
CARBURETOR	Carburetor to heater screws	$\frac{1}{2}$ "	16
	Carburetor heater to manifold	$\frac{9}{16}$ "	18
CLUTCH	Clutch housing to flywheel screws	$\frac{1}{2}$ "	16
	Clutch yoke lever bolt	$\frac{3}{4}$ "	24
FAN	Fan adjusting bolt	$\frac{3}{4}$ "	24
	Fan stud nut	$\frac{1}{2}$ "	30
	Fan stud screws	$\frac{1}{2}$ "	16
FENDERS	Front fender bracket nut	$\frac{1}{2}$ "	30
	Front fender to body bolts	$\frac{1}{4}$ "	14
	Rear fender to body screw	$\frac{1}{2}$ "	16
	Rear fender to frame	$\frac{3}{4}$ "	24
FRONT AXLE	Steering spindle nut	1 $\frac{3}{4}$ "	44X
	Steering spindle arm nut	1 $\frac{3}{4}$ "	44X
	Steering spindle arm ball nut	$\frac{1}{2}$ "	30
	Steering tie rod yoke bolt	$\frac{3}{4}$ "	24
	Steering tie rod yoke clamp bolt	$\frac{9}{16}$ "	20
	Steering tie rod yoke clamp bolt nut	$\frac{3}{4}$ "	24
GAS TANK	Gas tank support nut	$\frac{9}{16}$ "	18
GENERATOR	Generator coupling bolts	$\frac{1}{2}$ "	14

BLACKHAWK MANUFACTURING CO., MILWAUKEE

When you see a "HEX" think of Blackhawk



WRENCH SPECIFICATIONS FOR WORK ON HUDSON CARS—Continued
MODEL 1925

Part Name.		Size across Flats on Nuts	Blackhawk Socket No.
HEAD LAMPS	Head lamp bracket bolts	$\frac{3}{8}$	24
	Head lamp tie rod bolts	$\frac{1}{2}$	18
MOTOR	Cam shaft gear screws	$\frac{1}{8}$	18
	Connecting rod stud nut	$\frac{5}{8}$	20
	Cylinder to base stud nut	$\frac{7}{8}$	28
	Cylinder head stud nut	$\frac{7}{8}$	28
	Exhaust manifold to block screws	$\frac{3}{8}$	18
	Flywheel to crank shaft bolts	$\frac{1}{2}$	24
	Flywheel guard screws	$\frac{1}{4}$	16
	Horn bracket screws	$\frac{1}{2}$	16
	Main bearing stud nut	$\frac{3}{4}$	24
	Motor support bolts	$\frac{3}{4}$	24
	Motor drain plug	$\frac{5}{8}$ sq.....	.020
	Oil pan bolts	$\frac{1}{8}$	18
	Oil pump screws	$\frac{1}{8}$	103
	Timing gear cover screws	$\frac{1}{2}$	16
	Timer stand to motor screws	$\frac{1}{8}$	103
	Timer to stand screws	$\frac{1}{2}$	16
	Timer cross shaft bracket screws	$\frac{1}{2}$	16
	Valve cover screw	$\frac{1}{8}$	T1
	Water pump cover screws	$\frac{1}{8}$	14
	Water pump bracket to motor screw	$\frac{1}{2}$	103
	Water pump inlet to motor screws	$\frac{1}{8}$	18
	Water outlet manifold to cylinder screws	$\frac{1}{8}$	18
MUFFLER	Muffler to pipe bolt	$\frac{1}{2}$	16
	Muffler support bolt	$\frac{1}{2}$	16
	Muffler tail pipe support bolt	$\frac{1}{2}$	16
RADIATOR	Radiator support nut	$\frac{1}{2}$	26
	Water outlet to radiator screws	$\frac{1}{2}$	16
REAR AXLE	Differential case screws	$\frac{5}{8}$	18
	Differential support stud nut	$\frac{1}{2}$	30
	Drive pinion nut	$\frac{1}{2}$	34
	Rear axle shaft nut	$\frac{1}{2}$	46X
	Rear axle drain plug	$\frac{3}{8}$ sq.....	.024
	Rear axle filler plug	$\frac{3}{8}$ sq.....	.024
	Rear axle cover screws	$\frac{5}{8}$	18
	Rear axle differential carrier housing screw.....	$\frac{5}{8}$	18
RUNNING BOARD	Rear axle pinion bearing clamp bolt	$\frac{3}{4}$	24
	Running board to support nut	$\frac{5}{8}$ sq.....	.018
SPRINGS	Running board to fender bolts	$\frac{1}{8}$	18
	Front spring shackle bolt nuts (rear)	$\frac{1}{2}$	30
FRONT SPRINGS	Front spring shackle bolt nut (front)	$\frac{7}{8}$	28
	Front spring clip nut	$\frac{7}{8}$	101
	Front spring clamp bolts	$\frac{1}{2}$	16
	Rear spring shackle bolt nut (rear)	$\frac{1}{2}$	30
	Rear spring shackle bolt nut (front)	$\frac{7}{8}$	28
	Rear spring clamp bolts	$\frac{1}{2}$	16
	Rear spring clip nut	$\frac{7}{8}$	28
STARTER	Starter bracket screws	$\frac{3}{4}$	24
STEERING GEAR	Steering gear case cover screw	$\frac{1}{2}$	16
	Steering gear case bracket clamp bolt	$\frac{7}{8}$	28
	Steering gear case bracket to frame bolt	$\frac{1}{8}$	18
TRANSMISSION	Transmission cover screws	$\frac{1}{2}$	16
	Transmission drain plug	$\frac{3}{4}$ sq.....	.024
	Transmission oil level plug	$\frac{1}{8}$ sq.....	.014
	Transmission rear bearing cover screws	$\frac{1}{8}$	18
	Transmission to motor bolts	$\frac{3}{4}$	24
	Universal joint bolts	$\frac{1}{2}$	16
RIM	Pedal bracket screws	$\frac{1}{8}$	18
	Rim nuts	$\frac{3}{4}$	24

FORD
HUDSON
HUP-MOBILE
JEW TT
NASH
OAK-LAND
OLDS-MOBILE
OVER-LAND
PACK-ARD
PAIGE
REO
RICKEN-BACKER
STAR
STUDE-BAKER
WILLYS-KNIGHT

BLACKHAWK MANUFACTURING CO., MILWAUKEE



When you see a "HEX" think of Blackhawk

HUPMOBILE OWNER'S SETS

With this assortment of Sockets and Handles the Hupmobile owner saves time and trouble—he has a tool for every bolt and nut on his car.

INTERCHANGEABLE SOCKET WRENCHES

No. 14— $\frac{7}{16}$ "	Hex. Socket.....	\$0.30
No. 16— $\frac{1}{2}$ "	Hex. Socket.....	.30
No. 18— $\frac{9}{16}$ "	Hex. Socket.....	.30
No. 20— $\frac{5}{8}$ "	Hex. Socket.....	.30
No. 24— $\frac{3}{4}$ "	Hex. Socket.....	.40
No. T-5—	Double End Handle.....	.60
No. T-10—10"	Extension Bar.....	.75
No. 3310—12"	T Handle.....	1.00
No. 500—	Brace	1.20

Set Complete\$5.55

Canvas Bag 50c Extra

WRENCH SPECIFICATIONS FOR WORK ON HUPMOBILE CARS MODEL R 12—1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
BODY PARTS	Body to frame bolt nuts	$\frac{3}{4}$ sq.....	.024
BRAKE	Brake band support screws	$\frac{1}{2}$ hex.....	16
	Brake adjusting spring stud nut	$\frac{1}{8}$ "	18
	Brake cross shaft support bolts	$\frac{1}{8}$ "	18
	Brake cross shaft levers bolts	$\frac{1}{8}$ "	18
CARBURETOR	Carburetor to intake manifold screws	$\frac{1}{2}$ "	16
CLUTCH	Clutch to flywheel stud nuts	$\frac{7}{8}$ "	28
	Clutch finger adjusting nut	$\frac{1}{2}$ "	16
FAN	Fan to stud screws	$\frac{1}{2}$ "	16
	Fan stud nut	$\frac{7}{8}$ "	101
	Fan pulley nut	$\frac{3}{4}$ "	24
FENDERS	Front fender to body screws	$\frac{1}{8}$ "	14
	Front fender support to frame bolts	$\frac{9}{16}$ "	18
	Rear fender to body screw	$\frac{9}{16}$ "	18
	Rear fender support to frame bolt	$\frac{1}{2}$ "	16
FRONT AXLE	Steering drag link ball nut	$\frac{7}{8}$ "	28
	Drag link plug .....	.....	T1
	Steering knuckle spindle nut	$1\frac{1}{4}$ hex.....	40X
	Steering tie rod bolt nut	$\frac{11}{16}$ "	30
	Steering tie rod clevis clamp bolt	$\frac{1}{8}$ "	18
GAS TANK	Gas tank strap support nut	$\frac{9}{16}$ "	18
GENERATOR	Generator support screws	$\frac{9}{16}$ "	18
	Generator chain inspection cover screws	$\frac{1}{16}$ "	14
HEAD LAMPS	Head lamp stud nut	$\frac{11}{16}$ "	30
	Head lamp bracket to fender screws	$\frac{9}{16}$ "	18

BLACKHAWK MANUFACTURING CO., MILWAUKEE



WRENCH SPECIFICATIONS FOR WORK ON HUPMOBILE CARS—Continued
MODEL R 12—1925

Part Name.		Size across Flats on Nuts	Blackhawk Socket No.
MOTOR	Connecting rod stud nuts	$\frac{5}{8}$ "	20
	Cylinder head stud nut	$\frac{5}{8}$ "	24
	Exhaust manifold to cylinder stud nut	$\frac{1}{2}$ "	103
	Exhaust manifold to pipe	$\frac{1}{2}$ "	18
	Flywheel guard screws	$\frac{1}{2}$ "	16
	Flywheel to crankshaft bolts	$\frac{3}{4}$ "	24
	Intake manifold to cylinder screws	$\frac{1}{2}$ "	18
	Main bearing stud nut	$\frac{5}{8}$ "	24
	Motor drain plug	$\frac{1}{8}$ sq.	014
	Motor support (front)	$\frac{3}{4}$ hex.	24
	Motor support (rear)	$\frac{1}{2}$ "	30
	Oil pan screws	$\frac{1}{2}$ "	16
	Oil pump screen flange screw	$\frac{1}{2}$ "	14
	Oil pump inlet pipe flange screws	$\frac{1}{2}$ "	14
	Timer gear cover screws	$\frac{1}{2}$ "	16
	Valve cover screws	$\frac{1}{2}$ "	18
	Water inlet to cylinder screws	$\frac{1}{2}$ "	18
	Water jacket plate screws	$\frac{1}{2}$ "	16
	Water outlet manifold screws	$\frac{1}{2}$ "	16
MUFFLER	Muffler support bolt	$\frac{3}{4}$ "	18
	Muffler to pipe bolt	$\frac{1}{2}$ "	16
	Muffler tail pipe support bolt	$\frac{1}{2}$ "	16
RADIATOR	Radiator support stud nut	$\frac{3}{8}$ "	18
	Radiator apron to frame bolts	$\frac{1}{2}$ "	16
REAR AXLE	Rear axle housing (front) screws	$\frac{3}{8}$ "	18
	Rear axle housing bolt (split)	$\frac{1}{2}$ "	18
	Rear axle shaft nut	$1\frac{1}{4}$ "	40X
	Rear axle shaft bearing retainer screw	$\frac{1}{2}$ "	16
	Rear axle pinion nut	$\frac{3}{4}$ "	28
	Rear axle pinion bearing retainer screws	$\frac{1}{2}$ "	16
RUNNING BOARD	Running board to support bolt nuts	$\frac{1}{2}$ hex.	16
	Running board supports to frame bolts	$\frac{1}{2}$ "	16
SPRINGS	Front spring shackle bolt	$1\frac{1}{8}$ "	34
	Front spring shackle bolt bracket to frame bolts ..	$\frac{3}{8}$ "	18
	Front spring clip nut	$\frac{3}{4}$ "	102
	Rear spring shackle bolt nut	$1\frac{1}{8}$ "	34
	Rear spring clip nut	$\frac{3}{4}$ "	28
	Spring clamps bolts	$\frac{1}{2}$ "	16
STARTER	Starter to motor screw	$\frac{5}{8}$ "	20
STEERING GEAR	Steering gear adjustment lock	$\frac{3}{8}$ "	18
	Steering gear case cover screws	$\frac{1}{2}$ "	16
	Steering gear case support clamp bolt	$\frac{3}{8}$ "	20
	Steering gear lever nut	$1\frac{3}{8}$ "	44X
	Steering gear support to frame bolt	$\frac{1}{2}$ "	18
	Steering post bracket to cowl bolt	$\frac{1}{2}$ "	18
TRANSMISSION	Transmission cover screws	$\frac{1}{2}$ "	16
	Transmission to cylinder screws	$\frac{5}{8}$ "	20
	Transmission rear main bearing cover screws	$\frac{1}{2}$ "	16
	Transmission reverse gear cover screws	$\frac{1}{2}$ "	16
	Transmission drain plug	$\frac{1}{2}$ sq.	016
	Transmission spline shaft to universal nut	$\frac{3}{4}$ hex.	28
WHEELS	Universal joint bolts	$\frac{3}{8}$ "	18
	Rim nut	$\frac{5}{8}$ "	20

HUDSON

HUP-
MOBILE

JEW TT

NASH

OAK-
LAND

OLDS-
MOBILE

OVER-
LAND

PACK-
ARD

PAIGE

REO

RICKEN-
BACKER

STAR

STUDE-
BAKER

WILLYS-
KNIGHT



When you see a "HEX" think of Blackhawk

JEWETT OWNER'S SET

With this assortment of Sockets and Handles the Jewett owner saves time and trouble—he has a tool for every bolt and nut on his car.

INTERCHANGEABLE SOCKET WRENCHES

No. 16— $\frac{1}{2}$ "	Hex. Socket.....	\$0.30
No. 18— $\frac{9}{16}$ "	Hex. Socket.....	.30
No. 20— $\frac{5}{8}$ "	Hex. Socket.....	.30
No. 22— $\frac{11}{16}$ "	Hex. Socket.....	.30
No. 24— $\frac{3}{4}$ "	Hex. Socket.....	.40
No. 28— $\frac{7}{8}$ "	Hex. Socket.....	.40
No. 30— $\frac{15}{16}$ "	Hex. Socket.....	.50
No. T-4—	Offset and T.....	.60
No. T-5—	Double End Handle.....	.60
No. T-10—	10" Extension Bar.....	.75
No. 210—	6" T Handle.....	.75
No. 500—	Brace	1.20

Set Complete\$6.40

Canvas Bag 50c Extra

Sets on this page are the same as those used on 1925
Model 670 Paige Cars

WRENCH SPECIFICATIONS FOR WORK ON JEWETT CARS MODEL 1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
BODY PARTS	Body to frame nuts	$\frac{5}{16}$ sq.....	.020
BATTERY	Battery box support bolts	$\frac{1}{8}$ sq.....	.018
BRAKE	Brake support bolts	$\frac{1}{8}$	18
	Brake lever bolts	$\frac{1}{8}$	18
	Hand brake rack to trans screws	$\frac{1}{8}$	18
	Hand to brake drum bolts	$\frac{1}{2}$	16
CARBURETOR	Carburetor to motor screws	$\frac{1}{8}$.....	.103
CLUTCH	Clutch throwout lever plate screws	$\frac{1}{8}$	18
	Clutch to flywheel bolts	$\frac{7}{16}$	28
FAN	Fan stud nut	$\frac{11}{16}$	30
	Fan adjustment nut	$\frac{3}{4}$	24
	Fan drive pulley nut	1 $\frac{1}{16}$	34
FENDERS	Front fenders to frame bolts	$\frac{1}{2}$	16
	Rear fender to body screws	$\frac{1}{8}$	18
	Rear fender to running body bolts	$\frac{1}{2}$ sq.....	.016
FRONT AXLE	Drag link plug		T1
	Steering spindle pivot nut	1 $\frac{1}{4}$	36
	Steering spindle pivot arm nut	1 $\frac{1}{4}$	36
	Steering spindle pivot arm ball nut	1 $\frac{1}{8}$	34
GAS TANK	Gas tank support strap nuts	$\frac{1}{4}$	16
GENERATOR	Generator support screws	$\frac{1}{4}$	18

BLACKHAWK MANUFACTURING CO., MILWAUKEE



WRENCH SPECIFICATIONS FOR WORK ON JEWETT CARS—Continued
MODEL 1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
HEAD LAMP	Head lamp bracket to fender screws	$\frac{9}{16}$	18
	Head lamp stud nut	$\frac{11}{16}$	30
MOTOR	Connecting rod stud nut	$\frac{5}{8}$	20
	Cylinder head stud nut	$\frac{5}{8}$	20
	Exhaust manifold to cylinder screw	$\frac{11}{16}$	22
	Flywheel to crank shaft bolts	$\frac{3}{4}$	24
	Heater to cylinder screws	$\frac{1}{2}$	16
	Main bearing stud nut	$\frac{3}{4}$	24
	Motor support bolts (front)	$\frac{3}{4}$	24
	Motor support bolts (rear)	$\frac{3}{4}$	24
	Oil pan screws	$\frac{1}{2}$	16
	Timing gear cover screws	$\frac{1}{2}$	18
	Water pump cover screws	$\frac{1}{2}$	16
	Water pump support screws	$\frac{1}{2}$	18
	Water inlet to cylinder stud nuts	$\frac{1}{2}$	T16
	Water outlet to cylinder stud nut	$\frac{1}{2}$	16
MUFFLER	Muffler support bolts	$\frac{9}{16}$ sq.	.018
	Muffler end bracket to frame bolts	$\frac{1}{2}$	16
	Muffler tail pipe support bolt	$\frac{9}{16}$ sq.	.018
RADIATOR	Radiator support stud nut	$\frac{3}{4}$	24
REAR AXLE	Rear axle housing cover screws	$\frac{9}{16}$	18
	Rear axle housing screws (front)	$\frac{9}{16}$	18
	Rear axle shaft bearing cover screws	$\frac{9}{16}$	18
	Rear axle shaft nut	1 $\frac{1}{16}$	.46X
	Rear axle pinion bearing cover screws	$\frac{9}{16}$	18
RUNNING BOARD	Running board to support nuts	$\frac{9}{16}$ sq.	.018
	Running board support to frame bolts	$\frac{1}{2}$	16
SPRINGS	Front spring shackle bolt nuts	$\frac{11}{16}$	30
	Front spring clip nut	$\frac{11}{16}$	30
	Rear spring clip nut	$\frac{7}{8}$	28
	Rear spring shackle bolt nut (rear)	$\frac{11}{16}$	30
	Rear spring shackle bolt (rear)	$\frac{3}{4}$	28
	Rear spring shackle bolt nut (front)	1 $\frac{1}{4}$	.40X
	Rear spring shackle bolt (front)	1 $\frac{1}{8}$	36
	Spring clamp bolt	$\frac{1}{2}$	16
	Spring clamp bolt nut	$\frac{11}{16}$	18
STARTER	Starter to motor screws	$\frac{3}{4}$	24
STEERING GEAR	Steering gear case cover screws	$\frac{1}{2}$	16
	Steering gear support to frame bolts	$\frac{5}{8}$	20
	Steering gear housing clamp bolt	$\frac{1}{2}$	16
	Steering gear support clamp bolt	$\frac{3}{4}$	24
	Steering gear support clamp bolt nut	$\frac{7}{8}$	30
	Steering gear worm lock nut clamp bolt	$\frac{1}{2}$	16
	Steering gear worm wheel adjustment bolts	$\frac{1}{2}$	16
TRANSMISSION	Transmission cover screws	$\frac{9}{16}$	18
	Transmission drain plug	$\frac{3}{4}$ sq.	.024
	Transmission filler plug	$\frac{3}{4}$ sq.	.024
	Transmission rear main bearing cover screw	$\frac{9}{16}$	18
	Pedal pad adjusting bolts	$\frac{1}{2}$	16
	Transmission support screws	$\frac{3}{4}$	24
	Universal joint bolts	$\frac{1}{2}$	16
	Universal knuckle joint clamp bolt	$\frac{7}{8}$	20
WHEELS	Rim bolt nuts	$\frac{3}{4}$	24

HUP-
MOBILE

JEW TT

NASH

OAK-
LAND

OLDS-
MOBILE

OVER-
LAND

PACK-
ARD

PAIGE

REO

RICKEN-
BACKER

STAR

STUDE-
BAKER

WILLYS-
KNIGHT

BLACKHAWK MANUFACTURING CO., MILWAUKEE



When you see a "HEX" think of Blackhawk

NASH "ADVANCE SIX" OWNERS SET

With this assortment of Sockets and Handles the Nash owner saves time and trouble—he has a tool for every bolt and nut on his car.

INTERCHANGEABLE SOCKET WRENCHES

No.	16— $\frac{1}{2}$ "	Hex. Socket.....	\$0.30
No.	18— $\frac{3}{8}$ "	Hex. Socket.....	.30
No.	20— $\frac{5}{8}$ "	Hex. Socket.....	.30
No.	22— $\frac{11}{16}$ "	Hex. Socket.....	.30
No.	24— $\frac{3}{4}$ "	Hex. Socket.....	.40
No.	28— $\frac{7}{8}$ "	Hex. Socket.....	.40
No.	30— $\frac{11}{8}$ "	Hex. Socket.....	.50
No.	T-5—	Double End Handle.....	.60
No.	3310—12"	T Handle.....	1.00
No.	500—	Brace	1.20
Set Complete			\$5.30

Canvas Bag 50c Extra

WRENCH SPECIFICATIONS FOR WORK ON NASH ADVANCED SIX CARS MODEL 1924-1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
BODY PARTS	Body to frame	$\frac{1}{2}$	24
BRAKES	Front brake adjusting screw	$\frac{3}{8}$	24
	Front brake toggle lever clamp bolt	$\frac{5}{16}$	20
	Front brake lever bracket bolts	$\frac{1}{4}$	18
	Front brake lever nut	$\frac{1}{4}$	22
	Front brake cross shaft bracket bolts	$\frac{3}{8}$	18
	Front brake cross shaft lever nut	$\frac{3}{8}$	24
	Brake rod end plugs		T1
	Rear brake toggle lever nut	$\frac{1}{4}$	18
	Rear brake band adjusting nut	$\frac{3}{8}$	24
	Rear brake adjusting spring stud nut	$\frac{3}{8}$	24
	Rear brake band support screw	$\frac{1}{8}$	14
CARBURETOR	Carburetor to heater	$\frac{9}{16}$	18
CLUTCH	Clutch lever adjusting stud nut	$\frac{1}{2}$	18
	Clutch adjusting screw	$\frac{5}{8}$	20
	Clutch to flywheel screws	$\frac{1}{2}$	16
FAN	Fan to stud nut	$\frac{7}{8}$	28
	Fan to generator bolts	$\frac{9}{16}$	18
FENDERS	Front fender support to frame bolts	$\frac{1}{2}$	16
	Front fender to frame bolt	$\frac{7}{8}$	28
	Rear fender to body screws	$\frac{1}{8}$	20
	Fenders to running board bolts	$\frac{9}{16}$ sq.....	.018
FRONT AXLE	Steering knuckle nut	1 $\frac{1}{4}$	40X
	Steering knuckle arm nut	1 $\frac{1}{8}$	34
	Steering knuckle arm ball nut	$\frac{7}{8}$	28
	Steering tie rod clevis nut	$\frac{3}{4}$	28
	Steering tie rod clevis clamp bolt	$\frac{1}{2}$	18
	Drag link plug		T1
GAS TANK	Gas tank strap support nuts	$\frac{9}{16}$	18

BLACKHAWK MANUFACTURING CO., MILWAUKEE

When you see a "HEX" think of Blackhawk



WRENCH SPECIFICATIONS FOR WORK ON NASH ADVANCED SIX CARS—Continued
MODEL 1924-1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
GENERATOR	Generator to motor screw	$\frac{3}{4}$	102
HEAD LAMPS	Head lamp stud clamp bracket bolt	$\frac{5}{16}$	18
MOTOR	Cam shaft bearing screws	$\frac{1}{8}$	22
	Connecting rod stud nut	$\frac{5}{8}$	20
	Cylinder head stud nut	$\frac{3}{4}$	102
	Exhaust manifold to pipe screws	$\frac{5}{8}$	18
	Exhaust and intake manifold stud nut	$\frac{7}{8}$	20
	Flywheel guard screws (rear)	$\frac{1}{2}$	14
	Flywheel guard screw (front)	$\frac{1}{2}$	16
	Heater to manifold screws	$\frac{1}{8}$	103
	Main bearing stud nut	$\frac{3}{4}$	24
	Motor drain plug	$\frac{1}{2}$ sq.	014
	Motor support bolt (rear left side)	$\frac{1}{2}$	34
	Motor support front clamp bolt	$\frac{3}{4}$	24
	Motor support front bracket to frame bolt	$\frac{5}{8}$	20
	Oil pan bolts	$\frac{1}{2}$	16
	Rear motor support bracket stud nuts	$\frac{3}{4}$	24
	Rocker shaft bracket screws	$\frac{1}{2}$	16
	Timing gear cover screws	$\frac{1}{2}$	16
	Timer screws	$\frac{5}{8}$	18
	Valve cover screws	$\frac{1}{2}$	16
	Water inlet to cylinder screws	$\frac{1}{2}$	16
	Water outlet to cylinder screw	$\frac{5}{8}$	18
MUFFLER	Muffler support to exhaust pipe bolts	$\frac{7}{8}$	14
	Muffler support to frame bolt	$\frac{1}{2}$	16
	Muffler tail pipe support bolts	$\frac{7}{8}$	14
RADIATOR	Radiator stud nut	$\frac{3}{4}$	28
	Radiator stud to frame bolts	$\frac{1}{8}$	18
REAR AXLE	Rear axle cover screw	$\frac{1}{2}$	16
	Rear axle drain plug	$\frac{1}{2}$ sq.	016
	Rear axle filler plug	$\frac{3}{4}$ sq.	024
	Rear axle housing screw (split)	$\frac{3}{4}$	24
	Rear axle pinion lock screw	$\frac{1}{2}$	16
	Rear axle shaft nut	$1\frac{3}{4}$	40X
	Universal joint bolts	$\frac{1}{2}$	16
RUNNING BOARD	Running board to support bolt nut	$\frac{5}{8}$ sq.	018
	Running board support to frame bolts	$\frac{1}{8}$	18
SPRING	Front spring shackle bolt nut	$\frac{1}{8}$	30
	Front spring clip nut	$\frac{1}{8}$	30
	Front frame cross bar bolt	$\frac{1}{8}$	28
	Front frame cross bar bolt nut	$\frac{1}{8}$	30
	Rear spring shackle bolt (rear)	$\frac{1}{8}$	30
	Rear spring shackle bolt nut (front)	$\frac{1}{8}$	32
	Rear spring clip nut	$\frac{1}{8}$	30
	Spring clamp bolts	$\frac{1}{2}$	16
STARTER	Starter to motor screw	$\frac{5}{8}$	20
	Starter bracket stud nut	$\frac{1}{8}$	18
STEERING GEAR	Steering gear assembly bolts	$\frac{1}{2}$	16
	Steering gear case to frame bolts	$\frac{1}{2}$	18
	Steering gear worm wheel adjusting screws	$\frac{1}{2}$	16
	Steering gear arm nut	$1\frac{1}{8}$	46X
TRANSMISSION	Transmission to motor screws	$\frac{1}{8}$	18
	Transmission cover screws	$\frac{1}{2}$	16
	Transmission rear bearing cover screws	$\frac{1}{2}$	18
	Transmission reverse gear plate screws	$\frac{1}{2}$	16
	Transmission brake band bracket screws	$\frac{1}{2}$	18
	Transmission brake band support stud nut	$\frac{1}{2}$	24
	Transmission brake drum to universal joint bolt	$\frac{1}{8}$	14
WHEEL	Disc wheel	$\frac{3}{4}$	24

BLACKHAWK MANUFACTURING CO., MILWAUKEE

JEW TT

NASH

OAK-
LAND

OLDS-
MOBILE

OVER-
LAND

PACK-
ARD

PAIGE

REO

RICKEN-
BACKER

STAR

STUDE-
BAKER

WILLYS-
KNIGHT



When you see a "HEX" think of Blackhawk

NASH "SPECIAL SIX" OWNER'S SET

With this assortment of Sockets and Handles the Nash owner saves time and trouble—he has a tool for every bolt and nut on his car.

INTERCHANGEABLE SOCKET WRENCHES

No. 16— $\frac{1}{2}$ "	Hex. Socket.....	\$0.30
No. 18— $\frac{3}{8}$ "	Hex. Socket.....	.30
No. 20— $\frac{5}{8}$ "	Hex. Socket.....	.30
No. 22— $\frac{1}{4}$ "	Hex. Socket.....	.30
No. 24— $\frac{3}{4}$ "	Hex. Socket.....	.40
No. 28— $\frac{7}{8}$ "	Hex. Socket.....	.40
No. 30— $\frac{1}{8}$ "	Hex. Socket.....	.50
No. T-5—	Double End Handle.....	.60
No. 3310—12"	T Handle.....	1.00
No. 500—	Brace	1.20

Set Complete\$5.30

Canvas Bag 50c Extra

WRENCH SPECIFICATIONS FOR WORK ON NASH SPECIAL SIX CARS MODEL 1924-1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
BODY PARTS	Body to frame	$\frac{3}{4}$	24
BATTERY	Battery support nuts	$\frac{1}{8}$ sq.	.018
BRAKES	Front brake adjusting screw	$\frac{3}{4}$	24
	Front cross shaft bracket to frame bolts	$\frac{1}{8}$	18
	Front brake lever bracket bolts	$\frac{1}{2}$	16
	Front brake lever nut	$\frac{3}{4}$	24
	Hand brake band support bracket screws	$\frac{1}{8}$	18
	Rear brake lever nut	$\frac{3}{4}$	24
	Rear brake adjusting nut	$\frac{3}{4}$	24
	Rear brake band support stud nut	$\frac{3}{4}$	24
CARBURETOR	Carburetor to heater screws	$\frac{1}{8}$	18
CLUTCH	Clutch lever stud nut	$\frac{1}{8}$	18
	Clutch adjusting screws	$\frac{5}{8}$	20
	Clutch to flywheel screws	$\frac{1}{2}$	16
FAN	Fan adjusting screws	$\frac{3}{4}$	24
	Fan to stud screws	$\frac{1}{2}$	16
FENDERS	Front fender support to frame bolts	$\frac{1}{4}$	16
	Fenders to running board bolts	$\frac{1}{8}$ sq.	.018
	Rear fender to body screws	$\frac{1}{8}$ sq.	.018
FRONT AXLE	Steering knuckle nut	$1\frac{1}{4}$	40X
	Steering knuckle arm nut	$1\frac{1}{8}$	34
	Steering arm ball nut	$\frac{3}{4}$	28
	Steering tie rod clevis nut	$\frac{3}{4}$	28
	Steering tie rod clevis clamp bolt	$\frac{1}{8}$	18
	Drag link plug		T1
GAS TANK	Gas tank strap bolts	$\frac{1}{8}$	18

BLACKHAWK MANUFACTURING CO., MILWAUKEE

When you see a "HEX" think of Blackhawk



WRENCH SPECIFICATIONS FOR WORK ON NASH SPECIAL SIX CARS—Continued
MODEL 1924-1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
GENERATOR	Generator adjusting stud nut	$\frac{3}{8}$	24
	Generator bracket clamp screw	$\frac{1}{2}$	16
HEAD LAMPS	Head lamp bracket to fender bolts	$\frac{1}{8}$	18
	Head lamp stud nut	$1\frac{1}{8}$	34
	Head lamp tie rod bolt	$\frac{1}{2}$	16
MOTOR	Connecting rod stud nut	$\frac{5}{8}$	20
	Cam shaft bearing screws	$\frac{1}{8}$	22
	Cylinder head stud nuts	$\frac{3}{4}$	102
	Exhaust manifold to pipe screws	$\frac{1}{8}$	18
	Exhaust and intake manifold stud nuts	$\frac{5}{8}$	20
	Flywheel guard screws	$\frac{1}{2}$	16
	Heater to manifold screws	$\frac{1}{8}$	18
	Motor drain plug	$1\frac{1}{8}$ sq.	014
	Motor support bolt (rear) (left side)	$1\frac{1}{8}$	34
	Motor support bolts (front)	$\frac{3}{8}$	20
	Main bearing stud nut	$\frac{3}{4}$	24
	Oil pan screws	$\frac{1}{2}$	16
	Rocker shaft bracket screw	$\frac{1}{2}$	16
	Timing gear cover screws	$\frac{1}{2}$	16
	Timing gear case screws (rear section)	$\frac{1}{8}$	18
	Valve cover screws	$\frac{1}{2}$	16
	Rear motor support bracket nuts	$\frac{3}{4}$	24
	Water inlet to cylinder screws	$\frac{1}{2}$	16
	Water outlet to cylinder screws	$\frac{1}{2}$	16
	Water pump to generator screws	$\frac{1}{8}$	103
MUFFLER	Muffler bracket to frame bolts	$\frac{1}{2}$	16
RADIATOR	Radiator stud nut	$\frac{7}{8}$	28
	Radiator stud to frame bolts	$\frac{1}{8}$	18
REAR AXLE	Rear axle drain plug	$\frac{3}{4}$ sq.	024
	Rear axle filler plug	$\frac{3}{4}$ sq.	024
	Rear axle housing bolts (split)	$\frac{5}{8}$	20
	Rear axle pinion bearing retainer screws	$\frac{1}{2}$	16
	Rear axle shaft nut	$1\frac{1}{4}$	40X
	Universal joint bolts	$\frac{1}{2}$	16
RUNNING BOARD	Running board to support nut	$\frac{1}{8}$ sq.	018
SPRINGS	Front spring shackle bolt nut (rear)	$1\frac{1}{8}$	34
	Front spring clip nut	$\frac{1}{8}$	30
	Frame front cross bar bolts	$\frac{7}{8}$	28
	Frame front cross bar bolt nut	$\frac{1}{8}$	30
	Rear spring shackle bolt nut	$1\frac{1}{8}$	34
	Rear spring clips	$\frac{1}{8}$	30
	Spring clamp bolts	$\frac{1}{8}$	14
STARTER	Starter to motor screw	$\frac{5}{8}$	20
	Starter bracket stud nut	$\frac{1}{8}$	18
STEERING GEAR	Steering gear assembly bolts	$\frac{1}{2}$	16
	Steering gear case to frame bolts	$\frac{5}{8}$	20
	Steering gear arm nut	$1\frac{1}{8}$	40X
	Steering worm wheel adjusting screws	$\frac{1}{2}$	16
TRANSMISSION	Transmission to motor screws	$\frac{3}{8}$	18
	Transmission rear bearing cover screws	$\frac{1}{8}$	18
	Transmission cover screws	$\frac{1}{2}$	16
	Reverse gear cover screw	$\frac{1}{2}$	16
WHEELS	Disc wheel nut	$\frac{3}{4}$	24

BLACKHAWK MANUFACTURING CO., MILWAUKEE

NASH

OAK-
LAND

OLDS-
MOBILE

OVER-
LAND

PACK-
ARD

PAIGE

REO

RICKEN-
BACKER

STAR

STUDE-
BAKER

WILLYS-
KNIGHT



When you see a "HEX" think of Blackhawk

OAKLAND OWNER'S SET

With this assortment of Sockets and Handles the Oakland owner saves time and trouble—he has a tool for every bolt and nut on his car.

INTERCHANGEABLE SOCKET WRENCHES

No.	16— $\frac{1}{2}$ "	Hex. Socket.....	\$0.30
No.	18— $\frac{9}{16}$ "	Hex. Socket.....	.30
No.	20— $\frac{5}{8}$ "	Hex. Socket.....	.30
No.	22— $\frac{11}{16}$ "	Hex. Socket.....	.30
No.	24— $\frac{3}{4}$ "	Hex. Socket.....	.40
No.	28— $\frac{7}{8}$ "	Hex. Socket.....	.40
No.	T-4	Offset and T.....	.60
No.	T-5	Double End Handle.....	.60
No.	T-6	6" Extension Bar.....	.65
No.	3310—12"	T Handle.....	1.00

Set Complete\$4.85

Canvas Bag 50c Extra

WRENCH SPECIFICATIONS FOR WORK ON OAKLAND CARS MODEL 6-54—1924-1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
BODY PARTS	Body to frame bolt nut	$\frac{11}{16}$	22
BATTERY	Battery box support bolt nut	$\frac{1}{2}$ sq.....	.016
BRAKES	Brake cross shaft bracket bolt nut	$\frac{5}{8}$	18
	Brake cross shaft support bolt	$\frac{11}{16}$	16
	Front brake lever bracket bolt	$\frac{11}{16}$	18
	Front brake adjusting nut	$\frac{7}{8}$	28
	Rear brake adjusting nut	$\frac{7}{8}$	28
	Rear brake band support nut	$\frac{1}{2}$	16
CARBURETOR	Carburetor to heater screws	$\frac{1}{2}$	T16
CLUTCH	Clutch to flywheel stud nut	$\frac{3}{4}$	24
FAN	Fan drive pulley nut	$1\frac{1}{8}$.....	.46X
	Fan drive pulley clamp screws	$\frac{1}{8}$	14
FENDERS	Front fender support to frame bolts	$\frac{3}{8}$	18
	Fenders to running board bolts	$\frac{1}{2}$ sq.....	.016
	Rear fender to body screws	$\frac{1}{2}$	16
FRONT AXLE	Steering knuckle nut	$1\frac{1}{4}$.....	.40X
	Steering knuckle arm nut	$1\frac{1}{8}$	34
	Steering tie rod end plug		T1
	Drag link plug		T1
GAS TANK	Gas tank support strap nuts	$\frac{1}{2}$.....	.103
GENERATOR	Generator to motor screws	$\frac{1}{8}$	18
HEAD LAMP	Head lamp bracket to fender bolts	$\frac{3}{8}$	18
	Head lamp stud nut	$\frac{7}{8}$	28

BLACKHAWK MANUFACTURING CO., MILWAUKEE

When you see a "HEX" think of Blackhawk



WRENCH SPECIFICATIONS FOR WORK ON OAKLAND CARS—Continued
MODEL 6-54—1924-1925

	Part Name.	Size across	
		Flats on Nuts	Blackhawk Socket No.
MOTOR	Connecting rod stud nuts	$\frac{1}{2}$	18
	Cylinder head stud nuts	$\frac{1}{2}$	22
	Cylinder to crank case stud nuts	$\frac{1}{2}$	4230
	Exhaust manifold to cylinder stud nuts	$\frac{1}{2}$	18
	Exhaust manifold to pipe screws	$\frac{1}{2}$	16
	Flywheel to crank shaft bolts	$\frac{1}{2}$	20
	Flywheel guard screw	$\frac{1}{2}$	18
	Heater to exhaust manifold screw	$\frac{1}{2}$	16
	Heater to intake manifold screws	$\frac{1}{2}$	18
	Main bearing stud nut	$\frac{1}{2}$	20
	Motor drain plug	$\frac{1}{2}$ sq.	.018
	Motor support bolts (front)	$\frac{3}{4}$	24
	Motor support bolts (rear)	$\frac{1}{2}$	30
	Motor shield bolts	$\frac{1}{2}$ sq.	.016
	Oil pan screws	$\frac{1}{2}$	18
	Timer clamp screw	$\frac{1}{2}$	18
	Timing gear case cover screw	$\frac{1}{2}$	18
	Water outlet manifold to cylinder screws	$\frac{1}{2}$	18
	Water pump to cylinder screws	$\frac{1}{2}$	18
MUFFLER	Muffler support bolts	$\frac{1}{2}$	16
RADIATOR	Radiator support stud nut	$\frac{1}{2}$	22
REAR AXLE	Rear axle drain plug	$\frac{1}{2}$ sq.	.016
	Rear axle drive pinion nut	$1\frac{1}{2}$	40X
	Rear axle housing cover screws	$\frac{1}{2}$	18
	Rear axle housing screws (front)	$\frac{1}{2}$	18
	Rear axle pinion adjusting lock screw	$\frac{1}{2}$	18
	Rear axle shaft nut	$1\frac{1}{2}$	46X
	Universal joint coupling bolt	$\frac{1}{2}$	103
	Universal joint bolts	$\frac{1}{2}$	20
RUNNING BOARD	Running board to support	$\frac{1}{2}$ sq.	.016
SPRINGS	Front spring shackle bolt nuts	$\frac{1}{2}$	30
	Front spring clip nut (rear)	$\frac{1}{2}$	24
	Rear spring shackle bolt nut (front)	$1\frac{1}{2}$	34
	Rear spring shackle bolt nut (rear)	$\frac{1}{2}$	30
	Rear spring clip nut	$\frac{1}{2}$	24
STARTER	Starter to motor screw	$\frac{3}{4}$	24
STEERING GEAR	Steering gear case cover screws	$\frac{1}{2}$	16
	Steering gear housing clamp screw	$\frac{1}{2}$	18
	Steering gear housing support cap screws	$\frac{1}{2}$	20
	Steering gear post clamp bolt	$\frac{1}{2}$	16
TRANSMISSION	Transmission cover screws (front)	$\frac{1}{2}$	16
	Transmission cover screws (rear)	$\frac{1}{2}$	18
	Transmission to bell housing screw	$\frac{1}{2}$	20
	Transmission bell housing to motor screw	$\frac{1}{2}$	20
	Transmission drain plug	$\frac{1}{2}$ sq.	.016
	Transmission rear bearing cover screws	$\frac{1}{2}$	16
	Transmission brake band support bracket screw	$\frac{1}{2}$	20
	Transmission brake drum bolt to universal coupling	$\frac{1}{2}$	16
	Transmission brake hand lever rack screws	$\frac{1}{2}$	16
	Transmission brake hand lever stud nut	$\frac{3}{4}$	24
WHEELS	Disc wheels	$\frac{3}{4}$	24

OAK-
LAND

OLDS-
MOBILE

OVER-
LAND

PACK-
ARD

PAIGE

REO

RICKEN-
BACKER

STAR

STUDE-
BAKER

WILLYS-
KNIGHT

BLACKHAWK MANUFACTURING CO., MILWAUKEE



When you see a "HEX" think of Blackhawk

OLDSMOBILE OWNER'S SET

With this assortment of Sockets and Handles the Oldsmobile owner saves time and trouble—he has a tool for every bolt and nut on his car.

INTERCHANGEABLE SOCKET WRENCHES

No.	16— $\frac{1}{2}$ "	Hex. Socket.....	\$0.30
No.	18— $\frac{7}{8}$ "	Hex. Socket.....	.30
No.	20— $\frac{5}{8}$ "	Hex. Socket.....	.30
No.	22— $\frac{11}{8}$ "	Hex. Socket.....	.30
No.	24— $\frac{3}{4}$ "	Hex. Socket.....	.40
No.	30— $\frac{11}{8}$ "	Hex. Socket.....	.50
No.	T-4—	Offset and T.....	.60
No.	T-5—	Double End Handle.....	.60
No.	T-10—	10" Extension Bar.....	.75
No.	500—	Brace	1.20
Set Complete			\$5.85

Canvas Bag 50c Extra

WRENCH SPECIFICATIONS FOR WORK ON OLDSMOBILE CARS MODEL 30—1924-1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
BATTERY	Battery hook bolt nut	$\frac{9}{16}$	18
BODY PARTS	Body to frame bolt nut	$1\frac{1}{8}$	22
BRAKES	Brake adjusting stud nut	$\frac{9}{16}$	18
	Brake equalizing cross shaft bracket bolt	$\frac{1}{2}$	16
	Brake equalizing cross shaft lever bolt	$\frac{1}{2}$	16
	Emergency brake lever stud nut	$\frac{3}{4}$	24
	Emergency brake support bracket cap screw	$\frac{5}{8}$	20
CARBURETOR	Carburetor to manifold cap screw	$\frac{1}{2}$	103
CLUTCH	Clutch adjustment bolt	$\frac{9}{16}$	18
	Clutch to flywheel cap screws	$\frac{1}{2}$	16
	Clutch pedal adjustment bolt	$\frac{1}{2}$	16
FAN	Fan bracket bolt and nut	$\frac{1}{2}$	16
	Fan hub stud nut	$\frac{1}{2}$	16
FENDERS	Front fender to frame bolt and nut	$\frac{9}{16}$	18
	Rear fender to body cap screw	$\frac{1}{2}$	16
	Rear fender to running board bolt and nut	$\frac{7}{16}$ sq.	014
FRONT AXLE	Drag link plug		T1
	Steering knuckle lever nut	$1\frac{1}{8}$	30
	Steering knuckle nut	$1\frac{1}{4}$	40X
	Steering tie rod yoke bolt and nut	$\frac{3}{4}$	24
	Steering tie rod yoke clamp bolt and nut	$\frac{1}{2}$	16
GASOLINE TANK	Gasoline tank strap bolt nut	$\frac{5}{8}$ sq.	020

BLACKHAWK MANUFACTURING CO., MILWAUKEE

When you see a "HEX" think of Blackhawk



WRENCH SPECIFICATIONS FOR WORK ON OLDSMOBILE CARS—Continued
MODEL 30—1924-1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
GENERATOR	Generator to motor cap screw	$\frac{9}{16}$	18
HEAD LAMPS	Head lamp bracket to fender bolt and nut	$\frac{1}{2}$	16
	Head lamp tie rod bolt and nut	$\frac{1}{2}$	16
	Head lamp to bracket stud nut	$\frac{3}{8}$	25
MOTOR	Connecting rod stud nut	$\frac{9}{16}$	18
	Cylinder head bolts	$\frac{5}{8}$	20
	Exhaust manifold to pipe bolt and nut	$\frac{9}{16}$	18
	Flywheel to crank shaft stud nut	$\frac{5}{8}$	20
	Intake and exhaust manifold stud nut	$\frac{9}{16}$	18
	Manifold to heater bolt nut	$\frac{1}{2}$	16
	Motor support bolt and nut (front)	$\frac{5}{8}$	20
	Motor support bolt and nut (rear)	$\frac{3}{4}$	24
	Oil pan to motor cap screw	$\frac{1}{2}$	16
	Oil pump cap screw	$\frac{1}{2}$	16
	Timer gear cover cap screw	$\frac{1}{2}$	16
	Valve cover nut	$\frac{9}{16}$	18
MUFFLER	Muffler to bracket bolt and nut	$\frac{9}{16}$	18
RADIATOR	Radiator to frame stud nut	$\frac{3}{4}$	24
	Radiator to shell bolt and nut	$\frac{1}{2}$ sq.	.016
REAR AXLE	Differential carrier housing bolt and nut	$\frac{9}{16}$	18
	Differential carrier housing clamp bolt	$\frac{9}{16}$	18
	Drive pinion nut	$1\frac{1}{16}$	34
	Drive shaft nut	$1\frac{1}{16}$	46X
	Propeller shaft coupling bolt and nut rear	$\frac{5}{8}$	20
	Rear axle drain plug	$\frac{1}{2}$ sq.	.016
	Rear axle housing cover cap screw	$\frac{9}{16}$	18
RUNNING BOARD	Running board to apron bolt and nut	$\frac{1}{2}$ sq.	.016
	Running board to support nut	$\frac{9}{16}$ sq.	.014
SPRINGS	Front spring clamps bolt and nut	$\frac{1}{2}$	16
	Front spring clip nut	$\frac{3}{4}$	24
	Front spring shackle bolt nut	$\frac{11}{16}$	30
	Rear spring clamp bolt and nut	$\frac{1}{2}$	16
	Rear spring clip nut	$\frac{3}{4}$	24
	Rear spring shackle bolt nut	$\frac{11}{16}$	30
STARTER	Starter end cover screws	$\frac{5}{8}$	20
	Starter to motor cap screw	$\frac{3}{4}$	24
STEERING GEAR	Steering gear housing bracket clamp bolt	$\frac{9}{16}$	18
	Steering gear housing cover bolts	$\frac{1}{2}$	16
	Steering post to cowl bracket clamp bolt	$\frac{1}{2}$	16
TRANSMISSION	Brake drum to transmission bolt and nut	$\frac{9}{16}$	18
	Propeller shaft coupling bolt and nut (front)	$\frac{5}{8}$	20
	Transmission case to motor bolt	$\frac{5}{8}$	20
	Transmission control cover bolts	$\frac{1}{2}$	16
	Transmission drain plug	$\frac{1}{2}$ sq.	.016
	Transmission drive shaft bearing cap screw	$\frac{1}{2}$	16
	Transmission main drive shaft nut (rear)	$1\frac{1}{4}$	40X
WHEELS	Rim nut	$\frac{3}{4}$	24
	Wheel hub bolt nut	$\frac{11}{16}$	22

OLDS-
MOBILE

OVER-
LAND

PACK-
ARD

PAIGE

REO

RICKEN-
BACKER

STAR

STUDE-
BAKER

WILLYS-
KNIGHT

BLACKHAWK MANUFACTURING CO., MILWAUKEE



When you see a "HEX" think of Blackhawk

OVERLAND OWNER'S SET

With this assortment of Sockets and Handles the Overland owner saves time and trouble—he has a tool for every bolt and nut on his car.

INTERCHANGEABLE SOCKET WRENCHES

No. 16— $\frac{1}{2}$ "	Hex. Socket.....	\$0.30
No. 18— $\frac{9}{16}$ "	Hex. Socket.....	.30
No. 20— $\frac{5}{8}$ "	Hex. Socket.....	.30
No. 22— $\frac{11}{16}$ "	Hex. Socket.....	.30
No. 24— $\frac{3}{4}$ "	Hex. Socket.....	.40
No. 28— $\frac{7}{8}$ "	Hex. Socket.....	.40
No. T-4—	Offset and T.....	.60
No. T-5—	Double End Handle.....	.60
No. T-10—	10" Extension Bar.....	.75
No. 500—	Brace	1.20
Set Complete		\$5.15

Canvas Bag 50c Extra

WRENCH SPECIFICATIONS FOR WORK ON OVERLAND CARS MODEL 91—1924-1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
BODY PARTS	Body to frame bolt nuts	$\frac{11}{16}$	22
BATTERY	Battery box to frame bolts	$\frac{1}{2}$	16
BRAKES	Brake band adjusting nut	$\frac{3}{4}$	20
	Brake band support nut	$\frac{11}{16}$	30
	Brake lever bracket to propeller tube bolts	$\frac{11}{16}$	18
	Brake rod lever screw	$\frac{1}{2}$	16
CLUTCH	Clutch to flywheel screw	$\frac{1}{2}$	16
	Clutch pedal clamp screw	$\frac{1}{8}$	18
	Clutch release fork bearing screws	$\frac{1}{2}$	16
FAN	Fan lever arm nut	$\frac{11}{16}$	30
FENDERS	Front fender bracket to frame bolts	$\frac{1}{2}$	16
	Front fender to frame bolts	$\frac{1}{2}$	16
	Rear fender to body screws	$\frac{1}{2}$	16
	Fender to running board bolt nut	$\frac{7}{16}$ sq.	014
FRONT AXLE	Front axle rubber bumper	$\frac{1}{2}$	16
	Steering arm nut	$1\frac{1}{8}$	34
	Steering knuckle nut	$1\frac{1}{2}$	40X
	Steering knuckle tie rod bolt nut	$\frac{3}{4}$	24
	Steering knuckle tie rod clevis clamp bolt	$\frac{1}{2}$	18
	Steering knuckle pivot bolt	$\frac{7}{8}$	28
	Drag link plug		T1
GAS TANK	Gas tank to dash bolts	$\frac{9}{16}$	18
GENERATOR	Generator to motor screws	$\frac{9}{16}$	18
HEAD LAMP	Head lamp bracket to fender bolts	$\frac{1}{2}$	16
	Head lamp tie rod bolts	$\frac{1}{2}$	16

BLACKHAWK MANUFACTURING CO., MILWAUKEE

When you see a "HEX" think of Blackhawk



WRENCH SPECIFICATIONS FOR WORK ON OVERLAND CARS—Continued
MODEL 91—1924-1925

Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
MOTOR		
Connecting rod stud nut	$\frac{9}{16}$	18
Connecting rod screw (wrist pin end)	$\frac{1}{2}$	16
Cylinder head screws	$\frac{5}{8}$	20
Exhaust manifold to pipe screws	$\frac{9}{16}$	18
Exhaust and intake manifold stud nut	$\frac{1}{8}$	22
Engine bolts (front and rear)	$\frac{1}{8}$	30
Flywheel to crank shaft bolts	$\frac{1}{2}$	18
Main bearing stud nut	$\frac{3}{4}$	24
Oil pan screws	$\frac{1}{2}$	16
Timing gear cover screw	$\frac{1}{2}$	16
Water inlet to cylinder screw	$\frac{1}{8}$	18
MUFFLER		
Muffler bracket bolt	$\frac{1}{8}$	18
Muffler tail pipe support bolt	$\frac{1}{8}$	18
RADIATOR		
Radiator stud nut	$\frac{9}{16}$	18
REAR AXLE		
Rear axle filler plug	1	32
Rear axle drain plug	$\frac{7}{8}$ sq.	014
Rear axle housing bolts	$\frac{1}{2}$	16
Rear axle shaft nut	$1\frac{3}{8}$	44X
Rear axle drive shaft housing screws	$\frac{3}{4}$	24
Rear axle rubber bumper bolts	$\frac{1}{2}$	16
Differential case screws	$\frac{9}{16}$	18
Propeller shaft nut	1	32
RUNNING BOARD		
Running board to bracket bolt nut	$\frac{7}{8}$ sq.	014
Running board bracket to frame bolts	$\frac{1}{2}$	16
Running board splash guard to fender bolt	$\frac{1}{2}$	16
SPRING		
Front spring frame bolt	1	32
Front spring shackle bolt nuts	$\frac{7}{8}$	28
Rear spring frame bolt nut	$\frac{7}{8}$	28
Rear spring shackle bolt	$\frac{7}{8}$	28
Spring clip nut (rear and front)	$\frac{3}{4}$	24
Spring clamp bolts	$\frac{1}{2}$	16
STARTER		
Starter to motor screws	$\frac{9}{16}$	18
STEERING GEAR		
Steering gear arm nut	$\frac{3}{4}$	24
Steering gear support to frame bolts	$\frac{9}{16}$	18
Steering gear to post coupling clamp bolt	$\frac{1}{2}$	16
TRANSMISSION		
Transmission cover screws	$\frac{1}{2}$	16
Transmission drain plug	$\frac{9}{16}$ sq.	018
Transmission case to motor screws	$\frac{9}{16}$	18
Universal housing bolts	$\frac{1}{2}$	16
WHEELS		
Rim nuts	$\frac{3}{4}$	24

BLACKHAWK MANUFACTURING CO., MILWAUKEE

OVER-
LAND

PACK-
ARD

PAIGE

REO

RICKEN-
BACKER

STAR

STUDE-
BAKER

WILLYS-
KNIGHT



When you see a "HEX" think of Blackhawk

PACKARD "SINGLE SIX" OWNER'S SET

With this assortment of Sockets and Handles the Packard owner saves time and trouble—he has a tool for every bolt and nut on his car.

INTERCHANGEABLE SOCKET WRENCHES

No.	14— $\frac{7}{16}$ "	Hex. Socket.....	\$0.30
No.	16— $\frac{1}{2}$ "	Hex. Socket.....	.30
No.	18— $\frac{5}{8}$ "	Hex. Socket.....	.30
No.	20— $\frac{3}{4}$ "	Hex. Socket.....	.30
No.	22— $\frac{11}{16}$ "	Hex. Socket.....	.30
No.	24— $\frac{3}{4}$ "	Hex. Socket.....	.40
No.	28— $\frac{7}{8}$ "	Hex. Socket.....	.40
No.	30— $\frac{13}{16}$ "	Hex. Socket.....	.50
No.	32—1"	Hex. Socket.....	.50
No.	34— $1\frac{1}{8}$ "	Hex. Socket.....	.65
No.	T-4—	Offset and T.....	.60
No.	T-5—	Double End Handle.....	.60
No.	T-10—	10" Extension Bar.....	.75
No.	3310—	12" T Handle.....	1.00
No.	500—	Brace	1.20
Set Complete			\$8.10

Canvas Bag 50c Extra

WRENCH SPECIFICATIONS FOR WORK ON PACKARD SINGLE SIX MODEL 1924-1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
BODY PARTS	Body to frame bolts	$\frac{5}{8}$	20
BATTERY	Battery box to frame bolts	$\frac{1}{2}$	16
BRAKES	Front brake adjusting screw	$\frac{9}{16}$	18
	Front axle brake operating shaft universal bolt.....	$\frac{11}{16}$	18
	Front axle brake shoe anchor bolt nut	$\frac{7}{8}$	28
	Front axle brake operating shaft bracket to frame bolts	$\frac{1}{2}$	16
	Rear axle brake anchor pin nut	$\frac{3}{4}$	24
	Front cross shaft bracket bolts	$\frac{1}{2}$	16
	Brake cross shaft bracket bolts (rear)	$\frac{1}{2}$	16
	Brake lever clamp bolts	$\frac{1}{2}$	16
	Hand brake stud nut	$\frac{15}{16}$	30
	Rear axle hand brake anchor pin nut	$\frac{3}{4}$	24
	Rear axle brake adjusting spring stud nut	$\frac{3}{4}$	24
	Rear brake lever bracket to rear axle housing screws	$\frac{9}{16}$	18
CARBURETOR	Carburetor to manifold screws	$\frac{1}{2}$	16
CLUTCH	Clutch casing screws	$\frac{9}{16}$	18
	Clutch lever clamp bolt	$\frac{11}{16}$	18
	Clutch pedal step up gear housing cover screw.....	$\frac{1}{2}$	16
FENDER	Front fender support frame bolts	$\frac{1}{2}$	16
	Front fender to frame screws	$\frac{11}{16}$	14
	Fenders to running board bolts	$\frac{1}{2}$	16
	Rear fender to body screws	$\frac{1}{2}$	16
	Fenders to running board apron bolts	$\frac{1}{8}$	14

BLACKHAWK MANUFACTURING CO., MILWAUKEE

When you see a "HEX" think of Blackhawk



WRENCH SPECIFICATIONS FOR WORK ON PACKARD SINGLE SIX—Continued
MODEL 1924-1925

		Size across Flats on Nuts	Blackhawk Socket No.
FRONT AXLE	Steering knuckle arm bolt	$\frac{5}{8}$	20
	Steering cross tube clevis clamp bolt	$\frac{5}{8}$	20
	Steering cross tube bolt	$\frac{3}{4}$	24
	Steering connecting rod plug	$\frac{3}{4}$	T1
	Steering connecting rod ball joint nut	$\frac{7}{8}$	28
GAS TANK	Gas tank support bolt nut	$\frac{5}{8}$	20
GENERATOR	Generator to motor screws	$\frac{7}{8}$	103
HEAD LAMP	Head lamp bracket to fender bolts	$\frac{5}{8}$	20
	Head lamp bracket clamp bolt	$\frac{1}{2}$	16
MOTOR	Connecting rod stud nuts	$\frac{1}{2}$	18
	Cylinder head stud nut	$\frac{5}{8}$	20
	Cylinder to case stud nut	$\frac{1}{2}$	T18
	Exhaust manifold to pipe bolts	$\frac{1}{2}$	18
	Flywheel to crank shaft bolts	$\frac{3}{4}$	24
	Main bearing stud nut	$\frac{3}{8}$	20
	Motor cylinder water jacket plate screws	$\frac{1}{4}$	14
	Motor support bolt (front)	$\frac{3}{4}$	24
	Motor support bolts (rear)	$\frac{5}{8}$	20
	Motor shield bolts	$\frac{1}{2}$	14
	Oil drain plug	$1\frac{1}{8}$	34
	Oil drain plate stud nut	$\frac{1}{2}$	16
	Oil pan stud nut	$\frac{1}{2}$	16
	Oil filler to motor screws	$\frac{1}{2}$	16
	Push rod crab stud nuts	$\frac{1}{2}$	14
	Rocker shaft cover stud nut	$\frac{1}{2}$	16
	Timing gear cover screws	$\frac{1}{2}$	16
	Water pump to cylinder stud nut	$\frac{1}{2}$	16
	Water inlet manifold to cylinder screws	$\frac{1}{2}$	16
	Water outlet to cylinder screws	$\frac{1}{2}$	14
MUFFLER	Muffler bracket to frame bolts	$\frac{1}{2}$	16
RADIATOR	Radiator stud nut	$\frac{1}{8}$	30
REAR AXLE	Differential drive gear screw	$\frac{1}{8}$	18
	Differential bearing adjusting lock nut	$\frac{3}{4}$	24
	Differential driving pinion bearing sleeve lock bolt ..	$\frac{3}{4}$	24
	Differential carrier screw	$\frac{5}{8}$	20
	Differential carrier torque arm pin clamp bolt	$\frac{5}{8}$	20
	Rear axle shaft nut	$1\frac{1}{8}$	46X
	Rear axle cover screw	$\frac{5}{8}$	20
	Rear axle drain plug	$1\frac{1}{8}$	36
	Rear axle filler plug	$1\frac{1}{8}$	34
	Rear axle torque arm retaining bolt	$\frac{1}{8}$	30
	Torque arm toggle bolt (front end)	$1\frac{1}{8}$	34
	Torque arm toggle spring nut	$\frac{1}{8}$	30
RUNNING BOARD	Running board to support bolt nuts	$\frac{1}{2}$	16
	Running board to apron bolts	$\frac{1}{8}$	14
SPRINGS	Front spring shackle bolt nuts	$1\frac{1}{8}$	34
	Front spring clip nut	$\frac{3}{4}$	24
	Rear spring shackle bolt nut	$1\frac{1}{8}$	34
	Rear spring clip nut	$\frac{3}{4}$	24
	Rear spring rubber bumper bolts	$\frac{1}{8}$	18
	Spring clamp bolts	$\frac{1}{2}$	16
STEERING GEAR	Steering gear case cover screw	$\frac{1}{2}$	16
	Steering gear support bolts to frame	$\frac{1}{8}$	18
TRANSMISSION	Transmission case to motor screws	$\frac{5}{8}$	18
	Transmission case cover screws	$\frac{1}{2}$	16
	Transmission drive shaft bearing cover screw (rear) ..	$\frac{1}{2}$	16
	Transmission air pump cover screws	$\frac{1}{2}$	16
	Universal joint bolt	$\frac{1}{2}$	T16
WHEELS	Disc wheels	$\frac{3}{4}$	24

PACK-
ARD

PAIGE

REO

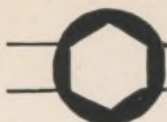
RICKEN-
BACKER

STAR

STUDE-
BAKER

WILLYS-
KNIGHT

BLACKHAWK MANUFACTURING CO., MILWAUKEE



When you see a "HEX" think of Blackhawk

PACKARD "STRAIGHT EIGHT" OWNER'S SET

With this assortment of Sockets and Handles the Packard owner saves time and trouble—he has a tool for every bolt and nut on his car.

INTERCHANGEABLE SOCKET WRENCHES

No.	14— $\frac{7}{16}$ "	Hex. Socket.....	\$0.30
No.	16— $\frac{1}{2}$ "	Hex. Socket.....	.30
No.	18— $\frac{5}{8}$ "	Hex. Socket.....	.30
No.	20— $\frac{5}{8}$ "	Hex. Socket.....	.30
No.	22— $\frac{11}{16}$ "	Hex. Socket.....	.30
No.	24— $\frac{3}{4}$ "	Hex. Socket.....	.40
No.	28— $\frac{7}{8}$ "	Hex. Socket.....	.40
No.	30— $\frac{11}{16}$ "	Hex. Socket.....	.50
No.	32—1"	Hex. Socket.....	.50
No.	34— $1\frac{1}{16}$ "	Hex. Socket.....	.65
No.	T-4—	Offset and T.....	.60
No.	T-5—	Double End Handle.....	.60
No.	T-10—	10" Extension Bar.....	.75
No.	3310—	12" T Handle.....	1.00
No.	500—	Brace	1.20

Set Complete\$8.10

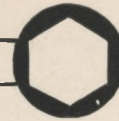
Canvas Bag 50c Extra

WRENCH SPECIFICATIONS FOR WORK ON PACKARD STRAIGHT EIGHT MODEL 1924-1925

	Part Name.	Size across Plats on Nuts	Blackhawk Socket No.
BODY PARTS	Body to frame bolts	$\frac{5}{8}$	20
BATTERY	Battery box to frame bolts	$\frac{1}{2}$	16
BRAKES	Front brake adjusting screw	$\frac{1}{8}$	18
	Front axle brake operating shaft universal bolt....	$\frac{1}{8}$	18
	Front axle brake shoe anchor bolt nut	$\frac{7}{8}$	28
	Front axle brake operating shaft bracket to frame bolt	$\frac{1}{2}$	16
	Front cross shaft bracket bolts	$\frac{1}{2}$	16
	Rear axle brake anchor pin nut	$\frac{3}{4}$	24
	Rear axle hand brake anchor pin nut	$\frac{3}{4}$	24
	Brake cross shaft bracket bolts (rear)	$\frac{1}{2}$	16
	Rear brake adjusting spring stud nut	$\frac{3}{4}$	24
	Rear brake lever bracket to rear axle housing screw	$\frac{1}{8}$	18
	Brake lever clamp bolts	$\frac{1}{2}$	16
	Hand brake stud nut	$\frac{1}{8}$	30
CARBURETOR	Carburetor to manifold screws	$\frac{1}{2}$	T16
CLUTCH	Clutch casing screw	$\frac{1}{8}$	18
	Clutch lever clamp bolt	$\frac{1}{8}$	18
	Clutch pedal step up gear housing cover screws....	$\frac{1}{2}$	16
FENDERS	Front fender support to frame bolts	$\frac{1}{2}$	16
	Front fender to frame bolts	$\frac{1}{2}$	14
	Front fender to running board bolt nuts	$\frac{1}{2}$	16
	Rear fender to body screws	$\frac{1}{2}$	16
	Rear fender to running board bolt nut	$\frac{1}{2}$	16
	Fenders to running board apron	$\frac{1}{8}$	14

BLACKHAWK MANUFACTURING CO., MILWAUKEE

When you see a "HEX" think of Blackhawk



WRENCH SPECIFICATIONS FOR WORK ON PACKARD STRAIGHT EIGHT—Continued
MODEL 1924-1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
FRONT AXLE	Steering knuckle arm bolts	$\frac{5}{8}$	20
	Steering knuckle ball joint nut	$\frac{7}{8}$	28
	Steering cross tube joint nut	$\frac{7}{8}$	28
	Steering cross tube clevis clamp bolts	$\frac{1}{2}$	16
	Steering connecting rod plug		T1
	Steering connecting rod ball joint nut	$\frac{7}{8}$	28
GAS TANK	Gas tank support bolt nuts	$\frac{5}{8}$	20
GENERATOR	Generator to motor screws	$\frac{1}{8}$	103
HEAD LAMPS	Head lamp brackets to fender bolts	$\frac{5}{8}$	20
	Head lamp bracket clamp bolt	$\frac{1}{2}$	16
MOTOR	Connecting rod stud nuts	$\frac{1}{2}$	18
	Cylinder head stud nuts	$\frac{5}{8}$	20
	Cylinder to case stud nuts	$\frac{1}{2}$	T18
	Exhaust to manifold to pipe bolts	$\frac{1}{2}$	18
	Flywheel to crank shaft bolts	$\frac{3}{4}$	24
	Main bearing stud nut	$\frac{5}{8}$	20
	Motor cylinder water jacket plate screw	$\frac{1}{2}$	14
	Motor support bolts (front)	$\frac{3}{4}$	24
	Motor support bolts (rear)	$\frac{1}{2}$	18
	Motor shield bolts	$\frac{1}{2}$	14
	Oil drain plug	$\frac{1}{2}$	34
	Oil drain plate stud nut	$\frac{1}{2}$	16
	Oil pan stud nut	$\frac{1}{2}$	16
	Oil filler to motor screw	$\frac{1}{2}$	16
	Push rod crab stud nut	$\frac{1}{2}$	14
	Rocker shaft cover stud nut	$\frac{1}{2}$	16
	Timing gear cover screw	$\frac{1}{2}$	16
	Water pump to cylinder stud nuts	$\frac{1}{2}$	16
	Water inlet manifold to cylinder screws	$\frac{1}{2}$	16
	Water outlet to cylinder screws	$\frac{1}{2}$	14
MUFFLER	Muffler bracket to frame bolts	$\frac{1}{2}$	16
RADIATOR	Radiator stud nut	1	32
REAR AXLE	Differential drive gear screw	$\frac{1}{2}$	18
	Differential bearing adjusting lock nut	$\frac{3}{4}$	24
	Differential driving pinion bearing sleeve lock bolt	$\frac{3}{4}$	24
	Differential carrier screw	$\frac{5}{8}$	20
	Differential carrier torque arm pin clamp bolt	$\frac{5}{8}$	20
	Rear axle cover screw	$\frac{5}{8}$	20
	Rear axle drain plug	$\frac{1}{2}$	36
	Rear axle filler plug	$\frac{1}{2}$	34
	Rear axle torque arm retaining bolt	1	32
	Torque arm toggle bolt (front end)	$\frac{1}{2}$	34
	Torque arm toggle spring nut	$\frac{1}{2}$	30
RUNNING BOARD	Running board to support bolt nut	$\frac{1}{2}$	16
	Running board to apron bolts	$\frac{1}{8}$	14
SPRINGS	Front spring shackle bolt nuts	$\frac{1}{2}$	34
	Front spring clip nuts	$\frac{3}{4}$	24
	Rear spring shackle bolt nuts	$\frac{1}{2}$	34
	Rear spring clip nuts	$\frac{1}{2}$	30
	Rear spring rubber bumper bolts	$\frac{1}{2}$	18
	Spring clamp bolt	$\frac{1}{2}$	16
STARTER	Starter to motor screw	$\frac{3}{4}$	24
STEERING GEAR	Steering gear case bolts	$\frac{1}{2}$	16
	Steering gear case to frame bolts	$\frac{1}{2}$	18
	Steering gear housing end plate screw	$\frac{1}{2}$	16
	Steering pillar tube attaching screws	$\frac{1}{2}$	16
TRANSMISSION	Transmission case to motor screws	$\frac{1}{2}$	18
	Transmission case cover screw	$\frac{1}{2}$	16
	Transmission driving shaft bearing cover screw (rear)	$\frac{3}{4}$	16
	Air pump to trans case screws	$\frac{1}{2}$	16
	Universal joint bolt	$\frac{1}{2}$	T16
WHEELS	Disc wheels	$\frac{3}{4}$	24

BLACKHAWK MANUFACTURING CO., MILWAUKEE

PAIGE

REO

RICKEN-
BACKER

STAR

STUDE-
BAKER

WILLYS-
KNIGHT



When you see a "HEX" think of Blackhawk

PAIGE OWNER'S SET

With this assortment of Sockets and Handles the Paige owner saves time and trouble—he has a tool for every bolt and nut on his car.

INTERCHANGEABLE SOCKET WRENCHES

No.	16— $\frac{1}{2}$ "	Hex. Socket.....	\$0.30
No.	18— $\frac{3}{8}$ "	Hex. Socket.....	.30
No.	20— $\frac{5}{8}$ "	Hex. Socket.....	.30
No.	22— $\frac{1}{2}$ "	Hex. Socket.....	.30
No.	24— $\frac{3}{4}$ "	Hex. Socket.....	.40
No.	28— $\frac{7}{8}$ "	Hex. Socket.....	.40
No.	30— $\frac{1}{2}$ "	Hex. Socket.....	.50
No.	T-4—	Offset and T.....	.60
No.	T-5—	Double End Handle.....	.60
No.	T-10—	10" Extension Bar.....	.75
No.	210—	6" T Handle.....	.75
No.	500—	Brace	1.20

Set Complete\$6.40

Canvas Bag 50c Extra

WRENCH SPECIFICATIONS FOR WORK ON PAIGE CARS MODEL NO. 670—1924-1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No
BODY PARTS	Body to frame	$\frac{5}{8}$ sq.....	.020
BATTERY	Battery box to support bolts	$\frac{1}{2}$ sq.....	.016
BRAKE	Brake cross shaft bracket to frame bolts	$\frac{1}{2}$	16
	Brake lever bolts	$\frac{5}{8}$	16
	Brake band adjusting stud nut	$\frac{3}{8}$	28
	Brake band support stud nut	1.....	34
	Hand brake rack to transmission screw	$\frac{1}{8}$	18
CARBURETOR	Carburetor to manifold screws	$\frac{1}{8}$.....	.103
CLUTCH	Clutch adjusting lever clamp bolts	$\frac{1}{8}$	18
	Clutch pedal adjusting clamp bolt	$\frac{1}{8}$	22
	Clutch to flywheel bolts	$\frac{3}{8}$	28
	Clutch yoke shaft lock screw	$\frac{1}{8}$	18
FAN	Fan adjusting nut	$\frac{3}{8}$	24
	Fan stud nut	$\frac{1}{8}$	30
	Fan to stud screw	$\frac{1}{2}$	16
	Fan pulley nut	$\frac{1}{8}$	30
FENDERS	Front fender support to frame bolts	$\frac{1}{8}$	18
	Front fender to frame bolts	$\frac{1}{8}$	16
	Rear fender to body	$\frac{1}{8}$	18
FRONT AXLE	Steering pivot spindle nut	1.....	.46X
	Steering pivot spindle arm nut	1.....	.44X
	Steering drag link ball nut	1.....	34
	Drag link plug .....	.....	T1
	Steering tie rod ball nut	1.....	34
	Steering tie rod plug end .....	.....	T1
GAS TANK	Gas tank to frame	$\frac{3}{8}$	24

BLACKHAWK MANUFACTURING CO., MILWAUKEE

When you see a "HEX" think of Blackhawk



WRENCH SPECIFICATIONS FOR WORK ON PAIGE CARS—Continued
MODEL NO. 670—1924-1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
GENERATOR	Generator to support screws	$\frac{1}{8}$	18
HEAD LAMPS	Head lamp bracket to fenders bolts	$\frac{9}{16}$	18
MOTOR	Connecting rod stud nut	$\frac{5}{8}$	20
	Cylinder head stud nuts	$\frac{5}{8}$	20
	Cylinder to case stud nuts	$\frac{5}{8}$	20
	Exhaust manifold to cylinder stud nuts	$\frac{1}{2}$	22
	Flywheel to crank shaft bolts	$\frac{7}{8}$	28
	Flywheel housing to crank case screws	$\frac{5}{8}$	20
	Main bearing stud nuts	$\frac{7}{8}$	28
	Motor drain plug	$1\frac{1}{8}$	36
	Motor support bolts (front)	$\frac{3}{4}$	24
	Oil pan to case bolts	$\frac{1}{2}$	18
	Oil gauge to pan screws	$\frac{1}{2}$	18
	Timing gear cover screws	$\frac{1}{2}$	18
	Valve guide cover nut	$\frac{7}{8}$	28
	Water outlet to cylinder screws	$\frac{1}{2}$	16
	Water pump housing to motor screws	$\frac{1}{2}$	103
	Water pump body cover screws	$\frac{1}{2}$	16
	Water pump outlet elbow screws	$\frac{1}{2}$	16
	Water outlet manifold to cylinder screws	$\frac{1}{2}$	103
MUFFLER	Muffler to support bolts	$1\frac{1}{8}$	22
	Muffler support bracket to frame bolts	$\frac{9}{16}$ sq.	018
RADIATOR	Radiator stud nut	$\frac{3}{4}$	24
	Radiator support bracket to frame bolt	$\frac{1}{2}$	18
	Radiator apron to frame bolts	$\frac{1}{2}$	16
REAR AXLE	Rear axle housing cover screws	$\frac{5}{8}$	18
	Rear axle housing screws (front)	$\frac{1}{2}$	18
	Rear axle pinion bearing cover screw	$\frac{5}{8}$	20
	Rear axle pinion adjusting nut clamp bolt	$1\frac{1}{8}$	22
	Rear axle shaft nut	$1\frac{1}{8}$	46X
	Rear axle filler plug	$\frac{1}{8}$ sq.	022
RUNNING BOARD	Running board to support nut	$\frac{9}{16}$ sq.	018
	Running board apron to running board bolts	$\frac{1}{2}$	16
SPRING	Front spring shackle bolt nuts	$1\frac{1}{8}$	30
	Front spring shackle bolts	$\frac{3}{4}$	24
	Front spring clip nuts	$\frac{7}{8}$	28
	Front spring clamp bolt	$\frac{1}{2}$	16
	Rear spring shackle bolt nut (front)	$1\frac{1}{4}$	40X
	Rear spring shackle bolt nut (rear)	$1\frac{1}{8}$	30
	Rear spring shackle bolt	$\frac{3}{4}$	24
	Rear spring clip nuts	$1\frac{1}{8}$	30
	Rear spring clamp bolts	$\frac{1}{8}$	18
STARTER	Starter to motor screw	1	3432
STEERING GEAR	Steering gear case cover screw	$\frac{1}{2}$	16
	Steering gear case clamp bolt	$\frac{1}{2}$	16
	Steering gear case support clamp bolt	$\frac{3}{4}$	24
	Steering gear case support clamp bolt nut	$\frac{7}{8}$	28
	Steering gear case support to frame	$\frac{9}{16}$	18
TRANSMISSION	Transmission cover screws	$\frac{9}{16}$	18
	Transmission drain plug	$\frac{3}{4}$ sq.	024
	Transmission filler plug	$\frac{1}{8}$ sq.	018
	Transmission support screws	$\frac{1}{2}$	18
	Transmission rear main bearing cover screws	$\frac{1}{2}$	18
	Universal joint bolts	$\frac{7}{8}$	20
	Universal joint coupling bolts	$\frac{1}{2}$	16
WHEELS	Rim nut	$\frac{3}{4}$	24

PAIGE

REO

RICKEN-
BAKER

STAR

STUDE-
BAKER

WILLYS-
KNIGHT

BLACKHAWK MANUFACTURING CO., MILWAUKEE



When you see a "HEX" think of Blackhawk

REO OWNER'S SET

With this assortment of Sockets and Handles the Reo owner saves time and trouble—he has a tool for every bolt and nut on his car.

INTERCHANGEABLE SOCKET WRENCHES

No. 16— $\frac{1}{2}$ "	Hex. Socket.....	\$0.30
No. 18— $\frac{5}{8}$ "	Hex. Socket.....	.30
No. 19— $\frac{3}{4}$ "	Hex. Socket.....	.30
No. 20— $\frac{7}{8}$ "	Hex. Socket.....	.30
No. 22— $1\frac{1}{8}$ "	Hex. Socket.....	.30
No. 24— $1\frac{3}{8}$ "	Hex. Socket.....	.40
No. 26— $1\frac{1}{2}$ "	Hex. Socket.....	.40
No. 28— $1\frac{3}{4}$ "	Hex. Socket.....	.40
No. 30— $1\frac{7}{8}$ "	Hex. Socket.....	.50
No. T-4—	Offset and T.....	.60
No. T-5—	Double End Handle.....	.60
No. T-10—	10" Extension Bar.....	.75
No. 3310—	12" T Handle.....	1.00
No. 500—	Brace	1.20
Set Complete		\$7.35

Canvas Bag 50c Extra

WRENCH SPECIFICATIONS FOR WORK ON REO CARS MODEL T-6—1924-1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
BODY	Body to frame bolt	$\frac{7}{8}$ sq.....	020
BATTERY	Battery box to support bolts	$\frac{9}{16}$	18
BRAKES	Brake cross shaft bracket bolts	$1\frac{1}{8}$	22
	Brake cross shaft lever bolts	$\frac{5}{8}$ sq.....	020
	Brake cross shaft lever bolt nuts	$\frac{3}{4}$	24
	Brake lever bolts (rear)	$\frac{9}{16}$ sq.....	018
	Brake lever bolt nut (rear)	$1\frac{1}{8}$	22
	Brake band adjusting stud nut	$\frac{3}{4}$	24
	Brake band support bracket bolt nut	$\frac{9}{16}$	18
	Internal brake support stud nut	$\frac{3}{4}$	24
CARBURETOR	Carburetor to intake manifold screws	$\frac{1}{2}$	T16
CLUTCH	Clutch throwout lever clamp bolts	$1\frac{1}{8}$	22
	Clutch throwout stud nut	$1\frac{1}{8}$	26
FAN	Fan bracket stud nut	$1\frac{1}{8}$	30
FENDERS	Front fender support to frame bolts	$\frac{3}{4}$	24
	Fender to running board bolts	$\frac{1}{2}$	16
	Rear fender to body screws	$\frac{9}{16}$	18

BLACKHAWK MANUFACTURING CO., MILWAUKEE

When you see a "HEX" think of Blackhawk



WRENCH SPECIFICATIONS FOR WORK ON REO CARS—Continued
MODEL T-6—1924-1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No
FRONT AXLE	Steering knuckle nut	1 1/8	34
	Steering spindle pivot nut	1	32
	Steering spindle pivot	1 1/8	34
	Steering knuckle arm nut	1 1/8	30
	Steering drag link plug	1 1/8	T1
	Steering drag link ball joint nut	1 1/8	30
	Steering tie rod clevis clamp bolt	3/4	20
GAS TANK	Gas tank support stud nut	1 1/8	22
GENERATOR	Generator strap stud nut	3/4	24
	Generator bracket to motor stud	3/4	24
HEAD LAMPS	Head lamp stud nut	3/4	24
	Head lamp tie rod bolts	1/2	18
MOTOR	Connecting rod stud nut	3/4	24
	Cylinder head stud	3/4	24
	Exhaust manifold to cylinder stud nut	3/4	24
	Exhaust manifold to pipe screw	5/8 sq.	020
	Flywheel to crank shaft bolts	7/8	28
	Intake manifold to motor screws	1/2	16
	Main bearings stud nuts	1 1/8	30
	Motor support bolts	3/4	24
	Rocker arm brackets stud nut	3/4	24
	Oil pan screws	1/2	16
	Water inlet to cylinder screw	1/2	16
	Water outlet to cylinder screw	1/2	16
	Water pump cover screws	1/2	16
	Water pump support screw	1 1/8	25
RADIATOR	Radiator stud nut	3/4	102
REAR AXLE	Differential carrier stud nut	1 1/8	22
	Differential carrier pinion bearing clamp bolt	3/4	20
	Rear axle cover stud nut	1 1/8	22
	Rear axle shaft nut	1 1/2	48X
	Torque rod retaining bolt nut	1	32
	Torque rod spring bolts (front)	3/4	24
	Universal joint bolts	7/8	28
RUNNING BOARD	Running board to support bolts	3/8	18
	Running board support to frame bolts	3/8	24
SPRING	Front spring shackle bolt nuts	3/8	28
	Front spring clip nut	7/8	28
	Rear spring shackle bolt nut (rear)	3/8	28
	Rear spring shackle bolt nut (front)	1 1/4	40X
	Rear spring clip nut	7/8	28
STARTER	Starter to bracket bolt	7/8	28
STEERING GEAR	Steering gear support bolts	1 1/8	22
	Steering gear housing bolts	1 1/8	19
TRANSMISSION	Transmission cover screws	1/2	16
	Transmission support screw	3/4	24
WHEELS	Rim nuts	1 1/8	22

BLACKHAWK MANUFACTURING CO., MILWAUKEE

REO

RICKEN-
BACKER

STAR

STUDE-
BAKER

WILLYS-
KNIGHT



When you see a "HEX" think of Blackhawk

RICKENBACKER 6 AND 8 CYLINDERS OWNER'S SET

With this assortment of Sockets and Handles the Rickenbacker owner saves time and trouble—he has a tool for every bolt and nut on his car.

INTERCHANGEABLE SOCKET WRENCHES

No. 14— $\frac{7}{8}$ "	Hex. Socket.....	\$0.30
No. 16— $\frac{1}{2}$ "	Hex. Socket.....	.30
No. 18— $\frac{9}{16}$ "	Hex. Socket.....	.30
No. 20— $\frac{5}{8}$ "	Hex. Socket.....	.30
No. 24— $\frac{3}{4}$ "	Hex. Socket.....	.40
No. 28— $\frac{7}{8}$ "	Hex. Socket.....	.40
No. 020— $\frac{5}{8}$ "	Sq. Socket.....	.40
No. 024— $\frac{3}{4}$ "	Sq. Socket.....	.50
No. T-1—	Drag Link and Tie Rod Screw End Driver .....	.50
No. T-4—	Offset and T.....	.60
No. T-5—	Double End Handle.....	.60
No. T-10—	10" Extension Bar.....	.75
No. 3310—	12" T Handle.....	.80
Set Complete		\$6.15

Canvas Bag 50c Extra

WRENCH SPECIFICATIONS FOR WORK ON RICKENBACKER CARS 6 CYLINDER MODEL 1924-1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
BODY PARTS	Body to frame bolt nuts	$\frac{11}{16}$	26
BRAKES	Front brake adjusting nut	$1\frac{1}{8}$	52X
	Front brake cross shaft bracket bolts	$\frac{1}{2}$	16
	Rear brake cross shaft bracket bolts	$\frac{1}{2}$	18
	Brake lever bolts	$\frac{1}{2}$	16
	Rear brake adjusting nut	$1\frac{1}{8}$	52X
	Brake pedal cross shaft bracket to frame.....	$\frac{9}{16}$	18
CARBURETOR	Carburetor to manifold screw	$\frac{9}{16}$	18
FAN	Fan adjusting nut	$\frac{9}{16}$	18
	Fan bracket to motor screw	$\frac{1}{2}$	18
FENDERS	Front fender support to frame	$\frac{1}{2}$	16
	Front fender to frame bolts	$\frac{1}{2}$	14
	Fenders to running board bolts	$\frac{1}{2}$	18
	Fenders to running board apron bolts	$\frac{1}{2}$	14
FRONT AXLE	Steering knuckle spindle nut	$1\frac{1}{4}$	40X
	Steering knuckle arm nut	$1\frac{1}{4}$	40X
	Steering knuckle arm ball joint nut	$\frac{3}{4}$	24
	Steering tie rod ball joint nut	$\frac{3}{4}$	24
	Steering tie rod end plug		T1
	Drag link plug		T1

BLACKHAWK MANUFACTURING CO., MILWAUKEE

When you see a "HEX" think of Blackhawk



WRENCH SPECIFICATIONS FOR WORK ON RICKENBACKER CARS—Continued
6 CYLINDER MODEL 1924-1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
GAS TANK	Gas tank support bolts	$\frac{1}{8}$	18
GENERATOR	Generator to motor	$\frac{3}{16}$	18
HEAD LAMPS	Head lamp stud nut	$\frac{3}{4}$	24
	Head lamp bracket to fenders bolts	$\frac{1}{8}$	18
MOTOR	Cylinder head stud nuts	$\frac{5}{8}$	20
	Exhaust manifold to motor stud nut	$\frac{1}{8}$	18
	Flywheel housing to motor screws	$\frac{1}{8}$	18
	Motor support bolt (front)	$\frac{1}{8}$	18
	Intake manifold to motor screws	$\frac{1}{8}$	18
	Oil pan	$\frac{1}{2}$	16
	Timing gear cover	$\frac{1}{8}$	18
	Water inlet to motor screws	$\frac{1}{8}$	20
	Water outlet to motor stud nuts	$\frac{1}{2}$	16
	Water pump screws	$\frac{1}{2}$	16
MUFFLER	Muffler support bolts	$\frac{1}{2}$	16
RADIATOR	Radiator stud nut	$\frac{3}{4}$	24
REAR AXLE	Differential carrier screws	$\frac{9}{16}$	18
	Differential carrier clamp bolt	$\frac{3}{4}$	24
	Rear axle cover screws	$\frac{1}{8}$	18
	Rear axle drain plug	$\frac{7}{8}$ sq.	020
	Rear axle filler plug	$\frac{3}{4}$ sq.	024
	Universal joint bolts	$\frac{5}{8}$	20
	Universal joint coupling bolt	$\frac{1}{2}$	16
RUNNING BOARD	Running board to support bolt nuts	$\frac{1}{8}$	18
	Running board to apron bolts	$\frac{1}{8}$	14
SPRING	Front spring shackle bolt nut	$\frac{7}{8}$	28
	Rear spring shackle bolt nut (rear upper)	$\frac{7}{8}$	28
	Rear spring shackle bolt nut (rear lower)	$\frac{1}{2}$	30
	Rear spring shackle bolt nut (front)	$\frac{1}{2}$	30
	Rear spring clip nuts	$\frac{7}{8}$	28
	Spring clamp bolt nuts	$\frac{1}{8}$	18
STARTER	Starter to motor screws	$\frac{9}{16}$	18
STEERING GEAR	Steering gear cover screws	$\frac{1}{2}$	16
	Steering gear arm nut	$1\frac{1}{8}$	46X
	Steering gear lock nut clamp bolt	$\frac{1}{2}$	16
	Steering gear case support clamp bolt	$\frac{3}{4}$	24
	Steering gear case support to frame bolts	$\frac{1}{8}$	18
TRANSMISSION	Transmission to flywheel housing screws	$\frac{3}{4}$	24
	Transmission drain and filler plug	$\frac{1}{8}$ sq.	022
	Transmission cover screws	$\frac{1}{8}$	18
	Transmission main drive shaft bearing cover screws	$\frac{1}{8}$	18
WHEEL	Rim nuts	$\frac{3}{4}$	24

BLACKHAWK MANUFACTURING CO., MILWAUKEE

RICKEN-
BACKER

STAR

STUDE-
BAKER

WILLYS-
KNIGHT



When you see a "HEX" think of Blackhawk

STAR OWNER'S SET

With this assortment of Sockets and Handles the Star owner saves time and trouble—he has a tool for every bolt and nut on his car.

INTERCHANGEABLE SOCKET WRENCHES

No.	16— $\frac{1}{2}$ "	Hex. Socket.....	\$0.30
No.	18— $\frac{5}{8}$ "	Hex. Socket.....	.30
No.	20— $\frac{3}{4}$ "	Hex. Socket.....	.30
No.	24— $\frac{3}{4}$ "	Hex. Socket.....	.40
No.	28— $\frac{7}{8}$ "	Hex. Socket.....	.40
No.	018— $\frac{1}{8}$ "	Sq. Socket.....	.35
No.	020— $\frac{5}{16}$ "	Sq. Socket.....	.40
No.	T-4	Offset and T.....	.60
No.	T-5	Double End Handle.....	.60
No.	T-10	10" Extension Bar.....	.75
No.	3310	12" T Handle.....	.80
Set Complete			\$5.20
Canvas Bag 50c Extra			

WRENCH SPECIFICATIONS FOR WORK ON STAR CARS MODEL F 1924-1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
BODY PARTS	Body to frame bolt nuts	$\frac{5}{8}$ sq.....	.020
BATTERY	Battery box stud nut.....	$\frac{1}{8}$.....	.103
BRAKES	Brake cross shaft bracket bolts	$\frac{1}{8}$.....	.18
CARBURETOR	Carburetor to intake screws	$\frac{1}{2}$	T16
CLUTCH	Clutch to flywheel screws	$\frac{1}{8}$.....	.18
FAN	Fan bracket to motor screw	$\frac{3}{8}$.....	.18
	Fan stud nut	$\frac{1}{8}$.....	.30
FENDERS	Front fender support to frame bolt	$\frac{5}{8}$.....	.18
	Rear fender to body screw	$\frac{1}{2}$.....	.16
	Fender to apron bolt	$\frac{1}{2}$.....	.16
	Fender to running board	$\frac{1}{2}$.....	.16
FRONT AXLE	Steering knuckle nut	$\frac{1}{8}$.....	.30
	Steering knuckle arm nut	$\frac{3}{8}$.....	.28
	Steering tie rod clevis bolt nut	$\frac{3}{4}$.....	.24
	Steering tie rod clevis clamp bolt	$\frac{3}{4}$.....	.24
GAS TANK	Gas tank support strap stud nuts	$\frac{1}{2}$.....	.16
GENERATOR	Generator support bolt	$\frac{5}{8}$.....	.20
HEAD LAMP	Head lamp bracket bolts	$\frac{1}{8}$.....	.18
	Head lamp stud nut	$\frac{1}{8}$.....	.28
	Head lamp bracket tie rod clamp bolt	$\frac{1}{8}$.....	.18

BLACKHAWK MANUFACTURING CO., MILWAUKEE

When you see a "HEX" think of Blackhawk



WRENCH SPECIFICATIONS FOR WORK ON STAR CARS—Continued
MODEL F 1924-1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
MOTOR	Connecting rod stud nuts	$\frac{1}{8}$	18
	Cylinder head stud nuts	$\frac{7}{16}$	20
	Exhaust manifold stud nuts	$\frac{1}{8}$	18
	Flywheel to crank shaft bolts	$\frac{1}{2}$	18
	Main bearing stud nut	$\frac{3}{4}$	24
	Motor drain plug	$1\frac{1}{2}$	36
	Motor support bolts (front)	$\frac{1}{2}$	18
	Motor support bolts (rear)	$\frac{1}{2}$	20
	Water outlet to cylinder screws	$\frac{1}{2}$	20
	Water pump screws	$\frac{1}{2}$	18
MUFFLER	Muffler to pipe clamp bolt	$\frac{1}{2}$	16
RADIATOR	Radiator stud nuts	$1\frac{1}{2}$	22
REAR AXLE	Rear axle shaft nut	$1\frac{1}{2}$	30
	Rear axle drain plug	$\frac{7}{8}$ sq.	.020
	Rear axle housing bolts (split)	$\frac{1}{2}$	16
	Rear axle pinion housing to rear axle screw	$\frac{3}{8}$	20
	Universal joint bolts	$1\frac{1}{8}$	14
RUNNING BOARD	Running board to support bolt springs	$\frac{1}{2}$	16
	Front spring shackle bolt nut	$\frac{7}{8}$	28
	Front spring shackle bolts	$\frac{3}{4}$	24
	Front spring clip nuts	$\frac{3}{4}$	24
	Rear spring shackle bolt nut	$\frac{3}{4}$	24
	Rear spring clip nut	$\frac{3}{4}$	24
	Spring clamp bolt	$\frac{1}{2}$	16
STARTER	Starter to motor bolt	$\frac{1}{2}$	18
STEERING GEAR	Steering gear cover screws	$\frac{1}{2}$	16
TRANSMISSION	Transmission drain plug	$1\frac{1}{8}$ sq.	.018
	Transmission cover screw	$\frac{1}{2}$	16
	Transmission case support (front)	$\frac{3}{8}$	20
	Transmission case support (rear)	$\frac{3}{8}$	24
WHEELS	Rim nuts	$\frac{3}{4}$	24

BLACKHAWK MANUFACTURING CO., MILWAUKEE

STAR

STUDE-
BAKER

WILLYS-
KNIGHT



When you see a "HEX" think of Blackhawk

STUDEBAKER OWNER'S SET

With this assortment of Sockets and Handles the Studebaker owner saves time and trouble—he has a tool for every bolt and nut on his car.

INTERCHANGEABLE SOCKET WRENCHES

No.	16— $\frac{1}{2}$ "	Hex. Socket.....	\$0.30
No.	18— $\frac{3}{8}$ "	Hex. Socket.....	.30
No.	20— $\frac{5}{8}$ "	Hex. Socket.....	.30
No.	22— $\frac{11}{16}$ "	Hex. Socket.....	.30
No.	24— $\frac{3}{4}$ "	Hex. Socket.....	.40
No.	26— $\frac{13}{16}$ "	Hex. Socket.....	.40
No.	28— $\frac{7}{8}$ "	Hex. Socket.....	.40
No.	T-4—	Offset and T.....	.60
No.	T-5—	Double End Handle.....	.60
No.	T-10—	10" Extension Bar.....	.75
No.	3310—	12" T Handle.....	1.00
No.	500—	Brace	1.20

Set Complete\$6.55

Canvas Bag 50c Extra

WRENCH SPECIFICATIONS FOR WORK ON STUDEBAKER CARS ALL MODELS 1924-1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
BODY PARTS	Body to frame bolt nuts	$\frac{7}{8}$ sq.....	.028
BATTERY	Battery box support bolt nuts	$\frac{1}{2}$ sq.....	.016
BRAKES	Brake cross shaft bracket bolts	$\frac{1}{2}$	16
	Brake cross shaft lever bolts	$\frac{7}{8}$	18
	Brake band adjusting nut	$\frac{7}{8}$	28
CARBURETOR	Pedal pads to pedal nuts.....	$\frac{1}{8}$.....	.103
CLUTCH	Clutch pedal to clutch lever bolts	$\frac{3}{8}$	18
	Pedal pads to pedal nuts.....	$\frac{3}{4}$	24
FENDERS	Front fender supports to frame bolts	$\frac{1}{2}$	16
	Front fender to frame bolts	$\frac{1}{2}$	16
	Fenders to running board apron bolts nuts	$\frac{1}{8}$ sq.....	.018
	Fenders to running board bolt nuts	$\frac{1}{8}$ sp.....	.018
	Rear fender to body screws	$\frac{1}{2}$	16
	Rear fender to frame bolt	$\frac{7}{8}$	18
	Rear fender to gas tank guard	$\frac{1}{8}$ sq.....	.018
FRONT AXLE	Steering knuckle nut	1 $\frac{1}{8}$.....	.44X
	Steering knuckle arm nut	1 $\frac{1}{8}$	34
	Steering knuckle arm ball joint nut	$\frac{3}{4}$	28
	Steering tie rod clevis bolt	$\frac{7}{8}$	28
	Steering tie rod clevis clamp bolt	$\frac{5}{8}$	20
	Drag link plug		T1

BLACKHAWK MANUFACTURING CO., MILWAUKEE

When you see a "HEX" think of Blackhawk



WRENCH SPECIFICATIONS FOR WORK ON STUDEBAKER CARS—Continued
ALL MODELS 1924-1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
GAS TANK	Gas tank support bolts	$\frac{3}{4}$	24
GENERATOR	Generator to motor screws	$\frac{1}{8}$	18
HEAD LAMPS	Head lamp stud nut	$\frac{1}{8}$	26
	Head lamp bracket to fenders bolt nut	$\frac{1}{8}$	18
MOTOR	Cylinder head stud nuts	$\frac{5}{8}$	20
	Cylinder block to case stud nuts	$\frac{3}{4}$	24
	Exhaust manifold to pipe bolts	$\frac{1}{8}$	T18
	Flywheel housing to case screws	$\frac{3}{4}$	24
	Heater to intake manifold stud nut	$\frac{1}{8}$	18
	Motor support bolts	$\frac{3}{4}$	24
	Oil drain plate screws	$\frac{1}{8}$	18
	Oil gauge flange screws	$\frac{1}{8}$	16
	Oil pan screws	$\frac{1}{8}$	16
	Oil filler screws	$\frac{1}{8}$	T18
	Terminal and fuse box stud nut	$\frac{3}{4}$	T24
	Timer to case screws	$\frac{1}{8}$	16
	Timer case to motor screws	$\frac{1}{8}$	16
	Timing gear cover screw	$\frac{1}{8}$	16
	Water outlet manifold stud nut	$\frac{5}{8}$	20
MUFFLER	Muffler to bracket bolts	$\frac{1}{8}$	18
	Muffler head to muffler nuts	$\frac{1}{8}$	22
RADIATOR	Radiator stud nuts	$\frac{3}{4}$	24
REAR AXLE	Differential carrier screws	$\frac{1}{8}$	22
	Differential carrier clamp bolt	$\frac{5}{8}$	20
	Differential pinion bearing lock nut	$\frac{3}{8}$	18
	Rear axle drain plug	$\frac{3}{8}$ sq.	024
	Rear axle cover screws	$\frac{1}{4}$	16
	Rear axle shaft nut	$\frac{1}{2}$	48X
	Universal joint bolts	$\frac{1}{2}$	T16
RUNNING BOARD	Running board to supports	$\frac{1}{8}$ sq.	018
SPRINGS	Front spring shackle bolt nut	$\frac{1}{8}$	34
	Rear spring shackle bolt nut (rear)	$\frac{1}{8}$	34
	Rear spring clip nuts	$\frac{1}{8}$	34
	Spring clamp bolts	$\frac{1}{8}$	19
STARTER	Starter to motor screws	$\frac{3}{4}$	24
	Starter switch bracket to motor screws	$\frac{1}{8}$	18
STEERING GEAR	Steering gear arm nut	$\frac{1}{8}$	34
	Steering gear arm ball joint nut	$\frac{7}{8}$	28
	Steering gear cover screws	$\frac{1}{8}$	18
	Steering gear lock nut clamp bolt	$\frac{1}{8}$	18
	Steering gear case support to frame bolts	$\frac{1}{8}$	18
	Steering gear case support clamp bolt	$\frac{3}{4}$	24
TRANSMISSION	Transmission cover screws	$\frac{1}{8}$	16
	Transmission to motor screws	$\frac{1}{8}$	18
	Transmission main drive shaft bearing cover screws	$\frac{1}{8}$	18
	Transmission drain plug	$\frac{5}{8}$ sq.	020
	Transmission filler plug	$\frac{3}{4}$ sq.	024
	Transmission brake drum to universal bolts	$\frac{1}{2}$	16
	Transmission brake band tightening guide pulley to frame bolts	$\frac{1}{2}$	16
	Transmission brake band tightening guide pulley to dash bolts	$\frac{1}{2}$	16
WHEELS	Rim nuts	$\frac{5}{8}$	20

BLACKHAWK MANUFACTURING CO., MILWAUKEE



When you see a "HEX" think of Blackhawk

WILLYS-KNIGHT OWNER'S SET

With this assortment of Sockets and Handles the Willys-Knight owner saves time and trouble—he has a tool for every bolt and nut on his car.

INTERCHANGEABLE SOCKET WRENCHES

No. 16— $\frac{1}{2}$ "	Hex. Socket.....	\$0.30
No. 18— $\frac{3}{8}$ "	Hex. Socket.....	.30
No. 20— $\frac{5}{8}$ "	Hex. Socket.....	.30
No. 22— $\frac{1}{2}$ "	Hex. Socket.....	.30
No. 24— $\frac{3}{4}$ "	Hex. Socket.....	.40
No. 28— $\frac{7}{8}$ "	Hex. Socket.....	.40
No. 30— $\frac{1}{2}$ "	Hex. Socket.....	.50
No. T-4—	Offset and T.....	.60
No. T-5—	Double End Handle.....	.60
No. T-10—	10" Extension Bar.....	.75
No. 3310—	12" T Handle.....	1.00
No. 500—	Brace	1.20
Set Complete		\$6.65

Canvas Bag 50c Extra

WRENCH SPECIFICATIONS FOR WORK ON WILLYS-KNIGHT CARS MODELS 64 and 74—1924-1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
BODY PARTS	Body to frame bolt nuts	$\frac{11}{16}$	22
BATTERY	Battery box bracket bolts	$\frac{9}{16}$	18
BRAKES	Brake band adjusting nut	$\frac{3}{4}$	24
	Brake band support screw	$\frac{9}{16}$	18
	Brake cross shaft bracket to frame bolts	$\frac{9}{16}$	18
	Brake shaft lever clamp nut	$\frac{1}{2}$	16
	Rear brake shaft bracket to rear axle housing screw	$\frac{9}{16}$	18
	Hand brake lever ratchet screw	$\frac{1}{2}$	16
CLUTCH	Clutch adjusting screw	$\frac{5}{8}$	20
FAN	Fan adjusting bolt	$\frac{9}{16}$	18
FENDERS	Front fender bracket to frame bolts	$\frac{1}{2}$	16
	Front fender to frame bolts	$\frac{1}{2}$	16
	Fenders to running board apron bolts	$\frac{1}{2}$	16
	Rear fender to body screws	$\frac{1}{2}$	16
	Fenders to running board bolt nut	$\frac{9}{16}$	18
FRONT AXLE	Steering knuckle nut	1 $\frac{1}{2}$	44X
	Steering knuckle arm nut	1 $\frac{1}{2}$	34
	Steering knuckle arm ball nut	$\frac{3}{4}$	24
	Steering tie rod clevis clamp bolt	$\frac{9}{16}$	18
	Steering tie rod end plug		T1
	Drag link plug		T1
GAS TANK	Gas tank support strap nut	$\frac{9}{16}$	18
GENERATOR	Generator support screws	$\frac{1}{2}$	16
HEAD LAMPS	Head lamp bracket to fender bolts	$\frac{9}{16}$	18
	Head lamp stud nut	$\frac{1}{2}$	28
	Head lamp tie rod bolt	$\frac{1}{2}$	18

BLACKHAWK MANUFACTURING CO., MILWAUKEE

When you see a "HEX" think of Blackhawk



WRENCH SPECIFICATIONS FOR WORK ON WILLYS-KNIGHT CARS—Continued
MODELS 64 and 74—1924-1925

	Part Name.	Size across Flats on Nuts	Blackhawk Socket No.
MOTOR	Connecting rod stud nut	5/8	20
	Connecting rod screw (wrist pin end)	1/2	16
	Coil bracket screws	1/2	16
	Cylinder head screw	5/8	20
	Engine bolts (front)	3/4	24
	Engine bolts (rear)	1 1/8	30
	Engine cylinder block to case stud nut	1 1/8	20
	Engine shield screws	7/8	14-16
	Exhaust manifold to motor stud nuts	1 1/8	22
	Exhaust pipe to manifold screws	1 1/8	18
	Flywheel to crank shaft bolts	1 1/8	18
	Flywheel guard to case stud nut	1 1/8	16
	Main bearing stud nuts	3/4	24
	Oil pan screws	1/2	16
	Timing gear cover screws	1/2	16
	Timer to generator screws	7/8	14
	Water inlet to cylinder screws	5/8	20
MUFFLER	Muffler bracket bolts	1 1/8	18
RADIATOR	Radiator stud nut	3/4	T24
REAR AXLE	Differential case screws	7/8	18
	Differential housing bearing cap stud nut	3/4	24
	Differential housing to rear axle stud nut	1 1/8	18
	Differential housing clamp screw	7/8	20
	Rear axle housing cover screws	7/8	18
	Rear axle pinion nut	1 1/8	36X
	Rear axle pinion lock screw	1 1/8	18
	Rear axle rubber bumper screws	1/2	16
	Propeller shaft coupling nut	3/4	24
	Propeller shaft safety loop bolt	1/2	16
RUNNING BOARD	Running board to support bolt nut	1 1/8	14
SPRINGS	Front spring shackle bolt nut	7/8	28
	Front spring clip nuts	3/8	25
	Rear spring shackle bolt nut (front)	1 1/8	34
	Rear spring shackle bolt nut (rear)	7/8	28
	Rear spring clip nuts	7/8	28
	Spring clamp bolts	1/2	16
STARTER	Starter to motor screw	3/4	24
STEERING GEAR	Steering gear lock nut bolt	5/8	20
	Steering gear case cover screws	1/2	16
	Steering gear support bracket clamp bolt	3/4	24
	Steering gear support bracket to frame bolts	5/8	20
TRANSMISSION	Transmission case to motor screws	1 1/8	18
	Transmission cover screws	1 1/8	18
	Transmission drain plug	1/2 sq.	016
	Transmission filler plug	3/4 sq.	024
	Transmission rear bearing cover screw	1 1/8	18
WHEELS	Rim nuts	3/4	24
	Rear wheel hub nut	7/8	28

BLACKHAWK MANUFACTURING CO., MILWAUKEE



Gray

Flint

Chrysler

Oakland

Chandler

Willys

Hudson

Cadillac

Paige

Reo

Packard

When you see a
"Hex" think of
Blackhawk